

Commonwealth of Massachusetts
Department of Telecommunications and Energy
Fitchburg Gas and Electric Light Company
Docket No. D.T.E. 02-24/25
Responses to the Attorney General's Seventh Set of Information Requests

Request No. AG-7-17 (Gas)

Please provide the test year amount of interruptible sales margins. Include all supporting documentation, calculations and assumptions. Provide the amount of the interruptible sales margins retained by the Company. Please reconcile this amount to the interruptible sales margins credited to customers through the CGA or LDAC during the test year. Include a copy of the Department's order authorizing the Company to share these margins.

Response:

Please refer to Attachment 1 AG-7-17 for the calculation of the Gas Division's interruptible sales (bundled sales) and interruptible supply (unbundled sales) margin for 2001. The Gas Division calculated an interruptible sales margin of \$26,043 for 2001 and an interruptible supply margin of \$24,632 for 2001, for a total margin of \$50,675. As shown on Attachment 2 AG-7-17, the calculation of interruptible sales margin sharing, the Gas Division retained \$0 margin during the year 2001. All interruptible sales and supply margins were credited to the CGA without any offset for margin sharing. Therefore, the entire interruptible sales margin of \$50,675 was returned to the Gas Division's firm sales customers via the CGAC.

Attachment 3 AG-7-17 provides the Department's February 14, 1996 Order authorizing the Gas Division to share margins.

Person Responsible: Karen M. Asbury

Fitchburg Gas and Electric Light Company
2001 Nonfirm Margin Summary (1)

INTERRUPTIBLE SALES (BUNDLED) MARGIN:												
Sales Volumes (DKTH)												
Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Total
Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01	Dec-01	
1,770.6	155.5	0.0	218.8	154.7	112.6	324.3	334.6	11,652.6	10,904.9	0.0	43.2	25,671.6
Revenues	\$19,003	\$4,172	\$0	\$3,846	\$842	\$521	\$1,588	\$40,758	\$33,784	\$0	\$177	\$106,272
Gas Costs	<u>\$18,427</u>	<u>\$1,045</u>	<u>\$0</u>	<u>\$1,300</u>	<u>\$769</u>	<u>\$465</u>	<u>\$1,122</u>	<u>\$29,271</u>	<u>\$26,510</u>	<u>\$0</u>	<u>\$170</u>	<u>\$80,229</u>
Interruptible Sales Margin	\$576	\$3,127	\$0	\$2,546	\$73	\$56	\$466	\$11,487	\$7,274	\$0	\$8	\$26,043
Average Selling Price	\$10.73	\$26.84	\$0.00	\$17.58	\$5.44	\$4.63	\$4.90	\$3.50	\$3.10	\$0.00	\$4.11	\$4.14
Cost per unit	<u>\$10.41</u>	<u>\$6.72</u>	<u>\$0.00</u>	<u>\$5.94</u>	<u>\$4.97</u>	<u>\$4.13</u>	<u>\$3.46</u>	<u>\$2.51</u>	<u>\$2.43</u>	<u>\$0.00</u>	<u>\$3.94</u>	<u>\$3.13</u>
Per unit Margin	\$0.33	\$20.12	\$0.00	\$11.64	\$0.47	\$0.50	\$1.44	\$0.99	\$0.67	\$0.00	\$0.18	\$1.01
INTERRUPTIBLE SUPPLY MARGIN:												
Sales Volumes (DKTH)												
914.9	0.0	612.4	207.9	681.1	7,524.1	9,552.2	12,075.4	13,128.6	27,645.4	18,385.3	15,087.5	105,814.7
Revenues	\$9,580	\$7,342	\$1,235	\$3,678	\$34,009	\$37,540	\$41,551	\$44,112	\$68,751	\$69,460	\$60,863	\$378,120
Gas Costs	<u>\$7,077</u>	<u>\$3,013</u>	<u>\$1,235</u>	<u>\$3,435</u>	<u>\$31,029</u>	<u>\$33,108</u>	<u>\$41,177</u>	<u>\$34,476</u>	<u>\$68,616</u>	<u>\$69,460</u>	<u>\$60,863</u>	<u>\$353,488</u>
Interruptible Supply Margin	\$2,503	\$4,329	(\$0)	\$243	\$2,980	\$4,432	\$374	\$9,636	\$135	(\$0)	(\$0)	\$24,632
Average Selling Price	\$10.47	\$0.00	\$11.99	\$5.94	\$4.52	\$3.93	\$3.44	\$3.36	\$2.49	\$3.78	\$4.03	\$3.57
Cost per unit	<u>\$7.74</u>	<u>\$0.00</u>	<u>\$4.92</u>	<u>\$5.94</u>	<u>\$4.12</u>	<u>\$3.47</u>	<u>\$3.41</u>	<u>\$2.63</u>	<u>\$2.48</u>	<u>\$3.78</u>	<u>\$4.03</u>	<u>\$3.34</u>
Per unit Margin	\$2.74	\$0.00	\$7.07	(\$0.00)	\$0.40	\$0.46	\$0.03	\$0.73	\$0.00	(\$0.00)	(\$0.00)	\$0.23

(1) For the period ending April 2001, FG&E calculated \$0 margin sharing.

(2) Includes capacity release revenue for April, June and July 2001.

Fitchburg Gas and Electric Light Company Margin Threshold

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Interruptible Sales & Supply

For the Year Ending April 2000 (a)			For the Year Ending April 2001 (1) (b)			Amount Above Threshold (b) - (a)	Company Margin At 25%
<u>Actual</u>	<u>Therms</u>	<u>Actual Margin</u>	<u>Therms</u>	<u>Margin</u>			
May-99	794,501	(\$2,476)	May-00	598,095	\$9,374	\$11,850	
Jun-99	954,555	\$2,585	Jun-00	428,102	\$5,020	\$2,435	
Jul-99	624,511	\$2,386	Jul-00	315,007	\$3,426	\$1,040	
Aug-99	425,462	\$11,176	Aug-00	316,263	\$2,083	(\$9,093)	
Sep-99	567,305	\$8,788	Sep-00	239,565	(\$410)	(\$9,198)	
Oct-99	563,728	\$3,227	Oct-00	346,466	\$1,755	(\$1,471)	
Nov-99	566,868	\$6,928	Nov-00	289,117	\$8,415	\$1,487	
Dec-99	803,310	\$24,070	Dec-00	60,839	\$2,865	(\$21,205)	
Jan-00	250,396	\$11,972	Jan-01	26,855	\$3,079	(\$8,893)	
Feb-00	599,405	\$29,421	Feb-01	1,555	\$3,127	(\$26,294)	
Mar-00	1,003,289	\$23,879	Mar-01	6,124	\$4,329	(\$19,550)	
Apr-00	<u>635,786</u>	<u>\$13,955</u>	Apr-01	<u>4,267</u>	<u>\$2,546</u>	<u>(\$11,409)</u>	
Total	7,789,114	\$135,909	Total	2,632,254	\$45,608	(\$90,301)	\$0

- (1) Actuals through April 2001
 (2) Because Customer A switched from bundled interruptible to FT beginning Nov 99, pursuant to Order DPU 93-141-A, their sales and margin have been removed from this analysis (May99-Oct99) in order to properly compare each period.
 (3) In order to properly calculate IS margin sharing and IT margin sharing, 2 customer's margins had to be reallocated to proper buckets. Customers B and C were bundled during the period May99-November99, becoming unbundled in December 1999. All of their margin, including May99-Nov99, was included in IT.

Interruptible Transportation

For the Year Ending April 2000 (a)			For the Year Ending April 2001 (1) (b)			Amount Above Threshold (b) - (a)	Company Margin At 25%
<u>Actual</u>	<u>Therms</u>	<u>Actual Margin</u>	<u>Actual</u>	<u>Therms</u>	<u>Actual Margin</u>		
May-99	688,367	\$5,416	May-00	389,675	\$38,670	\$33,253	
Jun-99	812,055	\$14,807	Jun-00	404,828	\$34,633	\$19,827	
Jul-99	435,768	\$20,312	Jul-00	248,609	\$22,589	\$2,277	
Aug-99	334,551	\$22,489	Aug-00	282,116	\$15,682	(\$6,807)	
Sep-99	349,602	\$25,946	Sep-00	206,157	\$13,923	(\$12,023)	
Oct-99	369,208	\$37,411	Oct-00	318,172	\$19,010	(\$18,402)	
Nov-99	368,404	\$21,148	Nov-00	285,041	\$21,877	\$729	
Dec-99	460,435	\$63,223	Dec-00	59,047	\$710	(\$62,513)	
Jan-00	191,359	\$39,518	Jan-01	9,149	\$91	(\$39,426)	
Feb-00	349,181	\$52,428	Feb-01	0	\$0	(\$52,428)	
Mar-00	564,379	\$71,168	Mar-01	6,124	\$61	(\$71,107)	
Apr-00	<u>384,305</u>	<u>\$40,225</u>	Apr-01	<u>2,079</u>	<u>\$21</u>	<u>(\$40,204)</u>	
Total	5,307,613	\$414,093	Total	2,210,996	\$167,268	(\$246,825)	\$0

- (1) Actuals through April 2001
 (2) In order to properly calculate IS margin sharing and IT margin sharing, 2 customer's margins had to be reallocated to proper buckets. Customers B and C were bundled during the period May99-November99, becoming unbundled in December 1999. All of their margin, including May99-Nov99, was included in IT.

Capacity Release

For the Year Ending April 2000 (a)		For the Year Ending April 2001 (1) (b)		Amount Above Threshold (b) - (a)	Company Margin At 25%
<u>Actual</u>	<u>Margin</u>	<u>Actual</u>	<u>Margin</u>		
May-99	\$0	May-00	\$0	\$0	
Jun-99	\$0	Jun-00	\$0	\$0	
Jul-99	\$756	Jul-00	\$0	(\$756)	
Aug-99	\$0	Aug-00	\$0	\$0	
Sep-99	\$1,288	Sep-00	\$0	(\$1,288)	
Oct-99	\$574	Oct-00	\$0	(\$574)	
Nov-99	\$294	Nov-00	\$0	(\$294)	
Dec-99	\$322	Dec-00	\$0	(\$322)	
Jan-00	\$0	Jan-01	\$0	\$0	
Feb-00	\$0	Feb-01	\$0	\$0	
Mar-00	\$0	Mar-01	\$0	\$0	
Apr-00	<u>\$0</u>	Apr-01	<u>\$2,700 (2)</u>	<u>\$2,700</u>	
Total	\$3,234	Total	\$2,700	(\$534)	\$0

- (1) Actuals through April 2001
 (2) Capacity release for April 2001 was not booked as capacity release until July 2001.



The Commonwealth of Massachusetts

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DEPARTMENT OF PUBLIC UTILITIES

February 14, 1996

D.P.U. 93-141-A

Investigation by the Department of Public Utilities on its own motion into the availability and proper rate for interruptible transportation offered by local distribution companies within the Commonwealth and related issues pertaining to local distribution companies' release of capacity in the interstate pipeline systems.

APPEARANCES: L. Scott Harshbarger, Attorney General

By: James W. Stetson

Edward G. Bohlen

Assistant Attorneys General

Regulated Industries Division

200 Portland Street

Boston, Massachusetts 02114

Limited Participant

Jeffrey M. Bernstein, Esq.

James W. White, Esq.

Bernstein, Kushner & Kimmel

One Court Street, Suite 700

Boston, Massachusetts 02108

FOR: EXECUTIVE OFFICE OF ECONOMIC
AFFAIRS' DIVISION OF ENERGY
RESOURCES

Limited Participant

Paul K. Connolly, Jr., Esq.

Scott G. Mueller, Esq.

LeBoeuf, Lamb, Greene & MacRae

260 Franklin Street

Boston, Massachusetts 02110

FOR: BAY STATE GAS COMPANY

Limited Participant

Richard G. McLaughry, Esq.
200 State Street
Boston, Massachusetts 02109
FOR: DISTRIGAS OF MASSACHUSETTS
CORPORATION
Limited Participant

Thomas G. Robinson
Associate General Counsel
New England Power Service Company.
25 Research Drive
Westborough, Massachusetts 01582
FOR: NEW ENGLAND POWER COMPANY AND
MASSACHUSETTS ELECTRIC COMPANY
Limited Participants

Charles H. Shoneman, Esq.
Randall S. Rich, Esq.
Bracewell & Patterson
2000 K Street N.W.
Washington, D.C. 20006
FOR: ENRON CAPITAL AND TRADE
RESOURCES CORPORATION
Limited Participant

Patrick J. Hester
Vice President/General Counsel
1284 Soldiers Field Road
Boston, Massachusetts 02135
FOR: ALGONQUIN GAS
TRANSMISSION COMPANY
Limited Participant

Glen S. Howard, Esq.
Sutherland, Asbill & Brennan
1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2404
FOR: MASSACHUSETTS INDUSTRIAL GROUP
Limited Participant

Robert J. Keegan, Esq.
Stephen H. August, Esq.
Keohane & Keegan
21 Custom House Street
Boston, Massachusetts 02110
FOR: ESSEX COUNTY GAS COMPANY
Limited Participant

Méabh Purcell, Esq.
LeBoeuf, Lamb, Greene & MacRae
20 Franklin Street
Boston, Massachusetts 02110
FOR: FITCHBURG GAS AND ELECTRIC
LIGHT COMPANY
Limited Participant

Robert N. Werlin, Esq.
Keohane & Keegan
21 Custom House Street
Boston, Massachusetts 02110
FOR: NORTH ATTLEBORO GAS COMPANY
Limited Participant

Nicholas J. Scobbo, Jr., Esq.
Robert M. Granger, Esq.
Ferriter, Scobbo, Sikora, Singal,
Caruso & Rodophele
One Beacon Street
Boston, Massachusetts 02108
FOR: MASSACHUSETTS MUNICIPAL
WHOLESALE ELECTRIC COMPANY
Limited Participant

Andrew J. Newman, Esq.
Rubin and Rudman
50 Rowes Wharf
Boston, Massachusetts 02110
FOR: THE ENERGY CONSORTIUM
Limited Participant

Emmett E. Lyne, Esq.
Eric J. Krathwohl, Esq.
Rich, May, Bilodeau & Flaherty
294 Washington Street
Boston, Massachusetts 02108

FOR: BERKSHIRE GAS COMPANY
FALL RIVER GAS COMPANY
Limited Participants

Catherine L. Nesser, Esq.
Jeffrey M. Leupold, Esq.
One Beacon Street
Boston, Massachusetts, 02108

FOR: BOSTON GAS COMPANY
Limited Participant

Timothy A. Clark, Esq.
Colonial Gas Company
40 Market Street, P.O. Box 3064
Lowell, Massachusetts 01853

-and-

Jeffrey F. Jones, Esq.
Jay E. Gruber, Esq.
Palmer & Dodge
One Beacon Street
Boston, Massachusetts 02108

FOR: COLONIAL GAS COMPANY
Limited Participant

John Cope-Flanagan, Esq.
COM/Energy Systems
One Main Street, P.O. Box 9150
Cambridge, Massachusetts 02142

FOR: COMMONWEALTH GAS COMPANY
Limited Participant

Nicholas W. Mattia, Jr., Esq.
Vice President, Regulatory Affairs
28 West Grand Avenue
Montvale, New Jersey 07645
FOR: O&R ENERGY, INC.
Limited Participant

Peter G. Esposito, Esq.
John, Hengerer & Esposito
1200 17th Street, N.W.
Washington, D.C. 20036
FOR: BROAD STREET OIL AND GAS COMPANY
Limited Participant

Gregory M. Lander, President
TransCapacity Limited Partnership
Two Corporate Place-128
107 Audubon Road, Suite 101
Wakefield, Massachusetts 01880
Limited Participant

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I. INTRODUCTION

A. Procedural History

On July 1, 1993, Bay State Gas Company ("Bay State"), pursuant to G.L. c. 164, § 94, filed with the Department of Public Utilities ("Department") a Standard Offer Contract for Interruptible Transportation. On July 29, 1993, the Department, on its own motion, opened an investigation into the proper rates to be charged for interruptible transportation offered by local distribution companies ("LDCs") within the Commonwealth, and an investigation into related issues involving LDCs' release of capacity on the interstate pipeline system. Order Opening Interruptible Transportation/Capacity Release Generic Investigation, D.P.U. 93-141 (1993). In its Order, the Department determined that it would investigate the following issues: (1) Bay State's Standard Offer Contract for Interruptible Transportation filed with the Department on July 1, 1993; (2) issues surrounding interruptible transportation raised by Bay State's proposal; (3) issues surrounding LDCs' release of capacity on the interstate pipeline system; and (4) any issues related to the release of capacity which the Department finds are developed sufficiently for Department review.¹ Id. at 5.

¹ During this proceeding, Colonial Gas Company ("Colonial") raised the question of whether, in order to establish a level playing field for all sellers in the gas market, a Massachusetts LDC legally may make off-system sales to end-use customers within Massachusetts (Exhs. DPU-11, at 18; DPU-144; Colonial Brief at 7 n.7). Colonial has identified a key policy area which has significant implications for the natural gas industry in Massachusetts, that is, extra-franchise operations. However, the issue of extra-franchise end-use sales is beyond the scope of this proceeding. Accordingly, the Department declines to address this issue herein.

On June 16, 1994, the Department determined that it would (1) sever the investigation of Bay State's individual proposal from the generic investigation, and (2) defer consideration of Bay State's proposal until after the disposition of the generic matter. As a result, the instant investigation was docketed as D.P.U. 93-141-A (June 16, 1994 Hearing Officer Memorandum at 2).

On June 23, 1994, the Department conducted a procedural conference. On July 9, 1994, the Department issued a Notice of Procedural Schedule and Scope of the Proceeding ("Notice of Procedural Schedule"). The Department indicated that it would adhere to the original scope of the proceeding, and would not expand the scope to encompass all possible topics arising from Federal Energy Regulatory Commission ("FERC") Order 636 (Notice of Procedural Schedule at 1, citing Tr. of Procedural Conference at 22-23).

Pursuant to the procedural schedule adopted by the Department, nine days of hearings were held in November and December 1994 at the offices of the Department in Boston. The Department granted the following petitions for leave to participate in the proceeding: Executive Office of Economic Affairs' Division of Energy Resources ("DOER"); Bay State; The Berkshire Gas Company ("Berkshire"); Boston Gas Company ("Boston Gas"); Broad Street Oil and Gas Company ("Broad Street"); Colonial Gas Company ("Colonial"); Commonwealth Gas Company ("ComGas"); Distrigas of Massachusetts Corporation ("DOMAC"); Enron Capital and Trade Resources Corporation ("Enron"); Essex County Gas Company ("Essex"); Fall River Gas Company ("Fall River"); Fitchburg Gas and Electric Light Company ("Fitchburg"); Massachusetts Industrial Group ("MIG"); Massachusetts Municipal Wholesale Electric Company ("MMWEC"); New England Power

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Company/Massachusetts Electric Company ("NEP"); North Attleboro Gas Company ("North Attleboro"); O&R Energy Group ("O&R"); The Energy Consortium ("TEC"); and TransCapacity Limited Partnership ("TransCapacity"). The Attorney General of the Commonwealth of Massachusetts ("Attorney General") participated as of right pursuant to G.L. c. 12, § 11E.

On or before September 2, 1994, the Department received prefiled statements from the Attorney General, DOER, Bay State, Berkshire, Boston Gas, Broad Street, Colonial, ComGas, Enron, Essex, Fitchburg, MIG, MMWEC, TEC, and TransCapacity. On or before October 3, 1994, the Department received comments from the Attorney General, DOER, Boston Gas, Colonial, ComGas, Enron, Essex, Fitchburg, MIG, MMWEC, North Attleboro, TEC, and TransCapacity. The record includes 308 exhibits submitted by the Department, and responses to 24 record requests issued by the Department to various participants.

On December 7, 1994, the Department issued a Notice of Suggested Briefing Issues, and established a date for filing briefs. Each of the following participants submitted a brief: the Attorney General; DOER; Bay State; Berkshire; Boston Gas; Colonial; ComGas; Fitchburg; MMWEC; MIG; Enron; DOMAC; Essex; TEC; TransCapacity; and North Attleboro.²

² On December 15, 1994, Bay State filed a Motion for Leave to File a Reply Brief. On January 10, 1995, the Hearing Officer issued a ruling denying Bay State's motion. There was no appeal of the Hearing Officer ruling.

B. Scope of Review

This proceeding has focused primarily on IT and, to a lesser extent, on other forms of non-core service, including capacity release and interruptible sales service. As we noted at the procedural conference, this proceeding does not address the full range of issues raised by FERC Order 636 (Tr. of Procedural Conference at 22-23). In particular, the appropriate structure, pricing and terms and conditions for firm sales and transportation service have been and will continue to be addressed on a case-by-case basis in LDC rate cases. The pricing mechanism for interruptible transportation set forth in this Order is intended to be consistent with the existing pricing regime for firm and quasi-firm transportation. We recognize that future changes in firm transportation pricing could compel a reexamination of the principles set forth in this Order.

Similarly, the Department recognizes the need to address the potential unbundling of firm LDC services in a comprehensive manner. As noted in Section III.B.2, below, we support in principle the permanent release of some level of interstate pipeline capacity and other types of capacity held by LDCs as part of a broader proposal to unbundle firm LDC services. We expect that Massachusetts LDCs will comprehensively address this issue as part of their ongoing service restructuring, and no later than each LDC's next rate case or incentive rate filing. However, because this issue is beyond the scope of this proceeding, it is addressed only peripherally in this Order.

In Section II of this Order, the Department discusses issues related to interruptible transportation on LDC distribution systems. In Section III, the Department examines issues surrounding LDCs' release of capacity on the interstate pipeline system. In Section IV, we

discuss ratemaking treatment for revenues from both interruptible transportation and capacity release. Finally, the Department addresses the implementation of the principles set forth in this Order in Section V, and provides a summary of those principles in Section VI.

II. INTERRUPTIBLE TRANSPORTATION

A. Introduction

Interruptible transportation ("IT") service, as addressed in this proceeding, is the transportation of customer-owned gas from an LDC's city-gate to the customer's burner-tip on an interruptible basis. IT service may be interrupted by either the LDC or the customer at any time, for any reason. In Section II.B, the Department considers its policy goals, the role which IT plays in the range of services offered by LDCs, and the role of regulation in IT service, in order to provide an analytical framework for its discussion of IT issues. In Section II.C, the Department examines whether it is necessary to require LDCs to unbundle their interruptible sales ("IS")³ service in order to ensure comparability of service to IS and IT customers. In Section II.D, we evaluate the appropriate method for pricing IT services. Finally, in Section II.E, we address certain issues regarding the terms and conditions under which IT service is offered.

B. Analytical Framework

1. Background

The Department's policy with respect to IT has developed from its existing IS policy.

³ IS service consists of the sale of LDC-owned gas to the customer at the customer's burner-tip on an interruptible basis. IS service can be interrupted by either the LDC or the customer at any time, for any reason.

Historically, IS service has been made available to dual-fuel customers during times when an LDC has surplus gas available after meeting its firm customer demand. The Department therefore has considered IS to be a pure opportunity transaction which LDCs should pursue in order to benefit firm customers. Boston Gas Company, D.P.U. 1100, at 28-31 (1982).

The Department stated its position on IS as follows:

Our view is that interruptible sales are the result of operating necessities created by the interplay of weather sensitive firm load and the constraints and obligations in supply contracts. As such, interruptible sales should be made only on the basis of sound management decisions to optimize the use of gas supplies for the benefit of a company's firm ratepayers Firm customers are entitled to the full benefits which can be derived from interruptible sales; we will not tolerate a policy or practice which fails to maximize these benefits.

Commonwealth Gas Company, D.P.U. 1120, at 89-90 (1982).

Since IS service was considered to be a market-driven service in which natural gas was but one energy option available to customers in a competitive market, the Department required IS service to be priced on a value-of-service ("VOS") basis. VOS pricing requires that IS prices be set slightly below the cost of the customer's alternative energy option, usually No. 2 or No. 6 fuel oil. D.P.U. 1100, at 30.⁴

When the Department mandated the introduction of IT services in 1987, it drew a direct parallel between IS and IT transactions, finding that IT should be made available to customers only when surplus distribution system capacity (as opposed to surplus gas) was available on an LDC's system. Gas Transportation, D.P.U. 85-178, at 40 (1987).

⁴ The Department, however, has approved contracts where gas has been used as the reference price, when the Department has found that gas, rather than oil, was the alternative fuel. See, e.g., Bay State Gas Company, D.P.U. 91-172, at 7-8 (1991).

Consistent with the VOS pricing structure used for IS, the Department found that VOS-based pricing was appropriate for IT customers, because VOS provided the greatest possible benefit to firm customers and because IT customers operated in a competitive energy market where market-based pricing systems were the best way to allocate scarce distribution system resources. Id. at 42-43.

In subsequent years, Massachusetts LDCs have developed a broader range of sales and transportation services, including: (1) firm transportation services with seasonal or monthly pricing ("quasi-firm transportation" or "QFT"); and (2) sales contracts that are firm for a pre-established number of months of the year ("quasi-firm sales" or "QFS"). Some QFS contracts provide for IS service to cover potential demand during peak months on an as-available basis. Finally, some LDCs have provided 365-day firm sales service under contracts that provide discounts from the corresponding firm sales service tariffs in order to retain customer load.

2. Positions of Participants

The participants in this case approach IT issues from three different, but not mutually exclusive, viewpoints that represent different perspectives on the role that IT should play in the range of services offered by LDCs. Most LDCs and the Attorney General view IT as an "opportunity service", i.e., a service that is made available whenever it is possible to make a profit for shareholders or firm ratepayers without impairing service to the firm customers who pay for the distribution system. From this perspective, IT is important as a tool for maximizing the efficient use of an LDC's distribution system where there is uncertainty regarding system availability, and for generating revenues to offset distribution system costs.

The second perspective on IT, held by end-user advocates and by DOER, emphasizes the value of IT to the IT customer, rather than to the distribution system. TEC, MIG, and DOER all propose changes to the terms or the pricing of IT that are intended to make the service less costly, more predictable, and more valuable to the user (see Exhs. DPU-16, at 3-4; DPU-18, at 1-2; DPU-25, at 2-3). MIG expresses a belief that "IT service may prove so reliable as to displace the need for firm service" (Exh. DPU-25, at 10).⁵

Finally, DOER and those participants who compete with LDCs for gas sales tend to view IT as a necessary component of a competitive Massachusetts gas market. These participants focus on the issue of comparability between IT and the transportation service bundled into the IS service offered by LDCs (DOER Brief at 14; TEC Brief at 6; MIG Brief at 9; DOMAC Brief at 1; Enron Brief at 2; TransCapacity Brief at 4).

In its briefing questions, the Department asked participants to comment on and set priorities for the policy goals that the Department should promote in this proceeding. The participants offered comments on: (1) economic growth; (2) maximizing benefits to core customers; (3) promoting gas-on-gas competition in the interruptible market; (4) providing levels of service appropriate to the needs of industrial customers; (5) promoting distribution system efficiency; and (6) promoting regulatory efficiency. While most participants emphasize the need to balance conflicting policy goals, there were differences of opinion as to which goal should take precedence. DOER, TEC, MIG, DOMAC, Enron, and

⁵ Under this scenario, IT would revert in effect to FT without minimum term of service provisions.

TransCapacity all argue that the promotion of gas-on-gas competition in Massachusetts is key to many other policy goals (DOER Brief at 20; TEC Brief at 2; MIG Brief at 7; DOMAC Brief at 1; Enron Brief at 2; TransCapacity Brief at 2-3). DOER, TEC, and MIG also assert that economic growth should be a primary policy consideration (DOER Brief at 2-5; TEC Brief at 2; MIG Brief at 7). The Attorney General argues that the Department should attempt to minimize the impact of the realignment of the natural gas industry on firm customers (Attorney General Brief at 1).

Among the LDCs, Bay State argues that the Department's primary goal should be to promote the long-run efficiency of LDC distribution systems (Bay State Brief at 9). Fitchburg and Boston Gas also emphasize the importance of efficient use of the distribution system while meeting the needs of core and non-core customers (Boston Gas Brief at 6-7; Fitchburg Brief at 1). Essex argues that the Department should aim to maximize benefits to those customers who pay for the system, while Berkshire requests flexibility to meet the needs of both core and non-core customers (Essex Brief at 5; Berkshire Brief at 3). ComGas contends that the "pure opportunity service" aspects of IT service make IT price regulation unnecessary, and advocates that the marketplace be allowed to take its "natural course" (Exh. DPU-13, Question 2-1; Tr. 3, at 83-84). Berkshire also questions the need for continued regulation of IT pricing (Berkshire Brief at 5-6).

3. Analysis and Findings

a. Policy Goals

The participants in this proceeding have offered a wide range of positions on the policies that should govern the Department's regulation of IT service. In balancing these

sometimes conflicting policy goals, it is important to consider the direction in which gas industry restructuring is heading. During the past two decades, the gas industry has become increasingly competitive. On the national level, the industry has moved toward a more fully competitive gas market, as set forth in FERC Orders 380,⁶ 436,⁷ and 451⁸. To promote choice and competition further, the Department ordered Massachusetts LDCs to develop transportation rates that enable end-users to procure their own supplies and transport them through the LDCs' distribution systems. See D.P.U. 85-178, at 66. Subsequently, Congress ordered the deregulation of wellhead gas prices and the unbundling of the transportation and merchant functions of interstate pipelines, which was implemented pursuant to FERC Orders

⁶ Elimination of Variable Costs from Certain Natural Gas Pipeline Minimum Commodity Bill Provisions, FERC Order No. 380, 49 Fed. Reg. 22778 (July 31, 1984), III FERC Stats. and Regs. Preambles ¶ 30,571 (June 1, 1984).

⁷ Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, FERC Order No. 436, 50 Fed. Reg. 42,408 (October 18, 1985), III FERC Stats. and Regs. Preambles ¶ 30,665 (1985), vacated and remanded, Associated Gas Distributors v. FERC, 824 F.2d 981 (D.C. Cir. 1987), cert. denied, 485 U.S. 1006 (1988), readopted on an interim basis, Order No. 500, 52 Fed. Reg. 30,334 (August 14, 1987), III FERC Stats. and Regs. Preambles ¶ 30,761 (1987), remanded, American Gas Association v. FERC, 888 F. 2d 136 (D.C. Cir. 1989), readopted, Order No. 500-H, 54 Fed. Reg. 52,344 (December 21, 1989), III FERC Stats. and Regs. Preambles ¶ 30,867 (1989), reh'g granted in part and denied in part, Order No. 500-I, 55 Fed. Reg. 6605 (February 26, 1990), III FERC Stats. and Regs. Preambles ¶ 30,880 (1990), aff'd in part and remanded in part, American Gas Association v. FERC, 912 F. 2d 1496 (D.C. Cir. 1990), cert. denied, 111 S. Ct. 957 (1991).

⁸ Ceiling Prices; Old Gas Pricing, FERC Order No. 451, 51 Fed. Reg. 22168 (July 18, 1986), III FERC Stats. and Regs. ¶ 30,700 (June 18, 1986).

636,⁹ 636-A,¹⁰ and 636-B¹¹ ("Order 636").¹² As a result of the implementation of Order 636, LDCs and many end-use customers have expanded choices, enabling them to better meet their needs for service. In a relatively short time, the regulatory landscape has been altered to promote choice and industry-wide competition. While the Department recognizes that robust, full competition for sales to many markets has not yet developed in the Massachusetts gas industry, the proper pricing of service will enhance customer choices in the interruptible market and promote full and fair competition. See Incentive Regulation, D.P.U. 94-158, at 6-7 (1995).

Customer choice requires gas supplier access to a stable and efficient local distribution system. By such a system, we mean one in which uneconomic customer migration between firm and interruptible service is minimized, and where the system is used in a way that maximizes its ability to meet long-term demand growth, taking into account the interaction among the various services offered by LDCs and the pricing of these services. Therefore, the Department's primary goal in this proceeding is to encourage the more efficient use of local distribution systems in order to provide better service to all customers

⁹ Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation and Regulation of Natural Gas Pipelines after Partial Wellhead Decontrol, FERC Order No. 636, 57 Fed. Reg. 13,267 (April 16, 1992), III FERC Stats. and Regs. Preambles ¶ 30,939 (April 8, 1992).

¹⁰ 57 Fed. Reg. 36,128 (August 12, 1992), III FERC Stats. and Regs. Preambles ¶ 30,950 (August 3, 1992).

¹¹ 57 Fed. Reg. 57,911 (December 8, 1992), 61 F.E.R.C. ¶ 61,272.

¹² For an overview of the restructuring of the natural gas industry as a result of the implementation of FERC Order 636, see Order on Standard of Review and Confidentiality, D.P.U. 93-187/188/189/190, at 2-4 (1994).

through lower prices and a better matching of services to the full range of customer needs.¹³ The other goals put forth by the participants in this proceeding, including economic development and benefits to firm customers, can be realized through the implementation of the Department's primary goal.

b. Role of IT in Range of LDC Services

Next, we turn to the role that IT plays in the range of services offered by LDCs. There is a fundamental disagreement among the participants in the gas market as to the appropriate role of IT. From the perspective of LDCs, IT service is an opportunity service which is complementary to core customer services. On the other hand, many end-users consider IT to be a legitimate service in and of itself. These customers contend that because IT is less subject to interruption than IS, and because IT has a de facto availability of nine to ten months per year, IT represents a low-cost alternative to firm service.

Given the current definition of, and pricing policies for, currently-available services, it appears that most Massachusetts gas customers, even those with fuel-switching capabilities, desire and are willing to pay for the level of service associated with FT or QFT. However, the Department's goal of broadening the effective range of services available to all customers convinces us of the desirability making "pure" IT available to those dual-fuel customers who

¹³ The Department notes that the efficient use of the local distribution system is not synonymous with short-term full or maximum use. Endorsement of short-term full or maximum use may encourage significant discounting of interruptible services to short-run marginal costs, thereby encouraging firm customers to switch to interruptible service. This could result in LDCs having insufficient firm load to earn an adequate return on investment or to encourage adequate investment to meet long-term demand.

want the freedom to fuel-switch based on cost, or who wish to purchase gas when it is available for environmental or other reasons (Tr. 3, at 93-94). IT service options also provide LDCs with the opportunity to maximize the use of their distribution systems by serving customers who, for whatever reason, do not desire to take firm service.

Despite the fact that IT historically has not played a major role in the Massachusetts gas market, future developments may change this situation. DOER claims that IT service represents a major growth area in the gas industry, and suggests that this national trend can be applied to Massachusetts (Exh. DPU-201). An increased demand for IT service may give rise to innovative contract features, such as sharing arrangements between an LDC and an IT customer of the costs associated with infrastructure needed to supply the customer, or margin-sharing arrangements. Given the potential for such developments, it is conceivable that IT will evolve from its current status as an opportunity service to a service in its own right. Accordingly, the Department concludes that it is appropriate to develop policies which do not hinder this potential for evolution in IT service.

c. Continued Regulation of IT Service

Finally, the Department notes that some participants have questioned whether continued regulation of IT service is in the public interest. While city-gate gas service has elements of market competition, in that customers may choose from a range of competing suppliers, the LDCs' distribution function remains a monopoly (Exhs. DPU-18, at 5; DPU-197). Even if LDCs were to divest their gas supply function to focus their attentions on distribution, LDCs will remain the key link between the city-gate and the customer burner-tip. Regardless of the changes taking place in the natural gas market, it must be noted that

only one distribution system exists to reach a customer's burner-tip.¹⁴ Transportation services will remain, at least for the foreseeable future, a monopoly function requiring some degree of regulation in order to prevent cross-subsidization of interruptible customers by core customers. See Weld v. Board of Gas and Electric Light Commissioners, 197 Mass. 556, 558-559 (1908). Accordingly, the Department finds that regulation of IT service, at least for the present, remains in the public interest.

C. Unbundling IS Service

1. Introduction

A number of participants in this proceeding have raised issues regarding the comparability between IT and the transportation underlying the LDCs' bundled IS service. In particular, Boston Gas, DOER and TEC submitted proposals for unbundling IS service into its constituent parts. In this section, the Department considers whether, in order to achieve comparability of service, it is appropriate to require LDCs to unbundle IS service, either at the city-gate into city-gate IS and transportation services, or into a greater number of services.

2. Department Authority

The Legislature has granted the Department broad ratemaking authority over gas and electric companies in G. L. c. 164, §§ 94 and 94G, which establish the Department's statutory obligations to set the rates of gas and electric companies. In addition to these

¹⁴ While dedicated pipelines serve some incremental independent power facilities, pipeline capacity constraints make bypass options less attractive (Tr. 4, at 32).

specific ratemaking sections, G.L. c. 164, § 76 grants the Department broad supervision of all gas and electric companies.

The courts have consistently stated that the Department's authority to design and set rates pursuant to G.L. c. 164 is broad and substantial. Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 447 (1956). American Hoechst Corporation v. Department of Public Utilities, 379 Mass. 408 (1980), citing Massachusetts Electric Company v. Department of Public Utilities, 376 Mass. 294, 302 (1978), states a basic principle of ratemaking. "The [D]epartment is free to select or reject a particular method as long as its choice does not have a confiscatory effect or is not otherwise illegal." ¹⁵

3. Unbundling Proposals

a. Boston Gas

Boston Gas states that, in order to ensure the viability of IT for its customers, IS service must be unbundled into two components: interruptible gas sales at the city-gate; and transportation on an LDC's distribution system (Exh. DPU-7, at 5). Boston Gas argues that a customer currently will select an LDC's bundled IS service unless it can buy gas delivered to the city-gate at less than the price that the LDC pays for gas at the wellhead (id. at 6). Boston Gas asserts that unbundled interruptible sales and transportation rates would facilitate cost comparisons between LDC and marketer gas prices, just as its unbundled firm rates do now (id. at 5).

¹⁵ For a comprehensive discussion of the Department's authority to unbundle rates, see Electric Restructuring, D.P.U. 93-30, at 39-44 (1995).

Boston Gas states that, on its own system, the transportation underlying IS service is firm (id. at 6). Thus, Boston Gas proposes to unbundle its IS service into interruptible gas sales at the city-gate, and a variety of levels of FT from the city-gate to the burner-tip (id.). The Company proposes that IS at the city-gate be priced on a VOS basis, since its customers have competitive options for that service (id. at 7). Under its proposal, Boston Gas would set a fixed rate for its various levels of FT based on its 365-day FT rates and the number of days of service chosen; however, this rate could be discounted if the customer could demonstrate an alternative to FT, such as burning oil (id.).

b. DOER

DOER states that Boston Gas' proposal only partially addresses the competitive advantage which IS currently has over IT, since the proposal does not resolve the issues of the availability and pricing of upstream capacity (Exh. DPU-17, at 7). In order to resolve these issues, DOER proposes that IS be unbundled into three components: gas supply, upstream pipeline transportation, and transportation on the LDC's distribution system (Exh. DPU-16, at 3). All interruptible customers would be required to elect an IT service separately from their gas service (id. at 4).

c. TEC

TEC argues that the LDCs' ability to offer bundled IS impedes true gas-on-gas competition (Exh. DPU-18, at 3). Specifically, TEC alleges that LDCs are not consistent in the application of gas costs which they use to convert the IS rate to an IT rate. TEC asserts that IS prices may be discounted so low that they attribute no value to the interstate pipeline capacity used to make the sales (id. at 4-5).

To resolve these problems, TEC proposes that IS be unbundled into three components: gas supply; an upstream pipeline capacity charge; and IT (id. at 14-15). The IT charge would be flexible with a cost-based cap, and would change once a month (id. at 7). Under TEC's proposal, the gas supply price would be market-based; however, an LDC would be required to credit the Cost of Gas Adjustment Clause ("CGAC") with the weighted average commodity cost of gas ("WACCOG") for each unit of gas sold out of its system supply (id. at 7-8). Alternatively, the LDC could purchase separate gas supplies for its interruptible customers; none of the costs of that supply would be passed on to core customers through the CGAC (id. at 8). The pipeline capacity charge would not be allowed to exceed the weighted average pipeline IT costs of the upstream pipelines serving the LDC (id. at 15). TEC suggests that, if an LDC offered a multiple-month price for IT, it should also be allowed to offer a multiple-month price for gas (id. at 9). The LDC still would have to credit the CGAC for system supply sold at its WACCOG price for each month, or else acquire a separate gas supply for its IS customers (id.). TEC notes that, under this scenario, LDCs would face the same gas cost risks as their competitors (id. at 10).

TEC strongly opposes Boston Gas' proposal to replace IT with varying levels of FT, arguing that this would force customers to buy a level of service which they do not need (Exh. DPU-19, at 3). TEC also argues that Boston Gas' unbundling proposal does not establish a value for interstate pipeline capacity (id.). TEC indicates that its own proposal differs from DOER's in details, but not in overall goals (id. at 7).

4. Responses to Unbundling Proposals

The responses to the unbundling proposals can be classified into three categories: (1) responses that oppose the unbundling of IS as burdensome and unnecessary; (2) responses that support limited unbundling, generally into city-gate sales and transportation components; and (3) responses that support unbundling IS into commodity, capacity, and transportation components.

Three LDCs, Colonial, Fitchburg, and Berkshire, oppose the unbundling of IS service. Berkshire states that its customers have expressed a preference for bundled service, and argues that unbundling IS into city-gate IS and IT would place the risks and burdens of daily nominations, balancing, and pipeline penalties on its end-users who do not want to assume such risks (Berkshire Brief at 7). Berkshire further suggests that out-of-state marketers, not Massachusetts customers, would be the primary beneficiaries of any unbundling scheme (*id.* at 7). Fitchburg states that unbundling is "unnecessary, impractical, and inapplicable to [its] system," and would result in increased transaction costs for its customers (Fitchburg Brief at 9-10). Fitchburg further argues that it should not be precluded from offering a service which marketers can replicate by bundling sales and IT (*id.* at 9).

Colonial argues that gas-on-gas competition is available without unbundling, since its interruptible customers can choose between bundled IS service and IT service (Colonial Brief at 6). Colonial believes that unbundling simply will result in administrative inconvenience for those customers who continue to require bundled IS service (*id.*). Colonial also argues that the unbundling of a city-gate IS price into commodity, capacity, and balancing components would place LDCs at a disadvantage with respect to marketers, who offer a

bundled city-gate service (id. at 7).

The Attorney General, Bay State, Essex, DOMAC, and MIG all support limited unbundling of IS at the city-gate. Bay State supports unbundling if it is defined as an effort to make prices for individual service components transparent, and if LDCs may continue to provide bundled services that are convenient and of high value to their customers (Exh. DPU-4, at 7). Bay State believes that the price of an unbundled city-gate IS service will be set by the market, and that IT service must, therefore, be priced on a VOS basis to collect the difference between gas costs and alternative fuel costs (Bay State Brief at 14). Essex states that it does not object to unbundling that involves offering each customer an IT price and a city-gate IS price, with the burner-tip IS price being the sum of the two (Essex Brief at 3). However, Essex believes that establishing a value for upstream pipeline capacity, which would be required for more complex unbundling, would be burdensome and will "... result in a de minimis or zero value." (id.). Further, Essex argues that the record shows that current IT customers purchase gas from marketers at the city-gate, rather than at the wellhead, and that LDCs must be able to offer bundled IS at the city-gate in order to compete with marketers (id. at 11).

The Attorney General states that unbundling IS into a city-gate IS service and IT would: (1) make explicit the use of an LDC's excess upstream capacity; (2) enable LDCs to set rates that accurately reflect the separate costs of the supply service and the distribution system; and (3) ensure that all IT customers, regardless of their supply source, receive comparable service (Exh. DPU-2, at 8-9). The Attorney General did not comment on more extensive unbundling proposals.

DOMAC asserts that unbundling IS at the city-gate is "critical to the creation of a truly competitive market for gas service to non-core customers" (DOMAC Brief at 1). DOMAC's comments focus not only on the need to properly unbundle the price of the services that make up IS, but also on the need to establish comparable terms and conditions for IT service (id. at 2). MIG states that unbundling IS into city-gate IS and IT will ensure that any costs relating to interstate pipeline demand charges are incorporated in the gas supply costs and do not appear as part of an LDC's IT charge (MIG Brief at 12-13).

Finally, Enron, MMWEC, and TransCapacity support extensive unbundling of IS service. Enron states that IS should be unbundled into three components so that customers will be able to determine which component is being discounted by the LDC (Enron Brief at 6). Enron argues that, to avoid cross subsidies from other ratepayers, LDCs should be required to make the unbundled services available at comparable discounts to third parties (id. at 6-7).

MMWEC argues that the current pricing of IS and IT favors the use of IS, thereby allowing the LDCs to extend their local monopoly to the upstream gas and transportation markets (Exh. DPU-28, at 4, 6). MMWEC proposes that LDCs establish separate prices for gas supply, interstate pipeline capacity, on-system transportation, and auxiliary services (id.). In the alternative, MMWEC's proposal would permit the sale of bundled IS at the city-gate with all customers using comparably priced transportation on the distribution system (id. at 6). MMWEC states that, while there is sufficient competition at the city-gate to allow city-gate IS, a further unbundling would benefit customers by allowing them access to three independent markets (MMWEC Brief at 9).

TransCapacity states that it supports extensive unbundling (TransCapacity Brief at 5).

5. Analysis and Findings

The purpose of unbundling any integrated service is to provide customers with accurate and unbiased information about the costs of different components of the service, thereby promoting reliance upon market forces. Thus, the Department must review the proposals to unbundle IS service presented here to determine if they are likely to promote competition in the interruptible market. The Department notes that the unbundling of IS service is unlikely to increase the availability of firm interstate pipeline capacity, since such capacity is not a component of IS service. Therefore, in order to support the unbundling of IS service, it is necessary to focus on the other potential benefits of unbundling.

Advocates of unbundling IS into city-gate IS and transportation, either FT or IT, generally have offered two reasons for their proposals. First, they expect that unbundling will enhance the viability of IT as an interruptible service option by allowing customers to distinguish clearly between gas supply and distribution costs. Second, they wish to promote competition at the city-gate by ensuring comparable IT service to all customers, regardless of where or how they purchase gas.

Unbundling of interruptible services, as a general concept, is consistent with recent developments in the natural gas market. The Department notes that city-gate unbundling likely would promote competition in the interruptible sector, both by making gas supply and distribution costs transparent, and by ensuring comparable IT service to all interruptible customers. Currently, IS customers generally are not presented with the various price components of the interruptible service offered by the LDC. This precludes them from

selecting the type of interruptible service, IT or IS, that would minimize their costs and lead to a more efficient utilization of their resources. Further, at present it is difficult to determine whether the transportation underlying IS is comparable to the IT (or QFT) offered by the LDCs. The Department notes that effective city-gate competition requires comparable transportation options. In turn, market participants are highly influenced by prices when evaluating the comparability of interruptible services. Competition in the interruptible market can thrive only if the prices and terms of gas supply and transportation are transparent, so that market participants are better able to evaluate the comparability of those services. As a result, customers will be able to select gas suppliers based on availability and the prevailing gas prices. Accordingly, the Department finds that the unbundling of interruptible services into interruptible sales and transportation components will facilitate a comparison of gas prices and ensure the comparable transportation services necessary to provide competition.

Some participants argue that city-gate interruptible sales should be unbundled further into commodity and interstate pipeline capacity components. They offer three arguments in support of this position. First, they argue that this further unbundling would enable customers to select only those specific services which they wish to purchase from an LDC, rather than buying a bundled city-gate gas service. Second, they expect such unbundling to place an appropriate value on interstate pipeline capacity held by LDCs, thereby reducing any LDC marketing advantage associated with holding that capacity. Third, they anticipate that such unbundling, combined with a program of mandatory capacity release, would increase end-user and marketer access to interstate pipeline capacity.

The record in this proceeding indicates that most independent gas marketers sell city-gate IS service, rather than gas at the wellhead. LDCs might be placed at a competitive disadvantage if they were required to unbundle city-gate IS into its constituent components, rather than to offer the same bundled city-gate IS service as their competitors. Further, as discussed in Section III.B, below, there does not appear to be a shortage of either interstate pipeline IT or released capacity to serve the interruptible market. Finally, the unbundling of city-gate IS into its constituent components does not appear to provide significant benefits that would outweigh the administrative difficulties and inconvenience to the majority of customers who apparently prefer bundled IS. Accordingly, the Department finds that unbundling of city-gate IS beyond its IS and IT components will not provide significant benefits to LDCs or their customers at this time. Therefore, the Department will not require LDCs to develop proposals for extensive unbundling of their IS service at this time. We recognize, however, that the Department may be compelled to reexamine this position in response to changes that may occur on an interstate level, e.g., the possible elimination of the current price cap on released interstate pipeline capacity traded in secondary markets.

At this time, therefore, the Department directs LDCs to develop and implement plans to unbundle their burner-tip IS service into city-gate IS service and IT service from the city-gate to the burner-tip. At a minimum, LDCs must quote a city-gate IS price and an IT price to any customer seeking interruptible service. Further, the Department directs companies to develop uniform terms and conditions for service to all IT customers, regardless of a customer's contractual source of gas.

LDCs may rebundle city-gate IS and IT or QFT into a burner-tip IS service, since the record suggests that many customers want this service. However, the transportation component of the bundled IS service must be comparable in both price and terms and conditions to the transportation that is offered on an unbundled basis. Further, LDCs may not discount the price of city-gate IS from that offered on an unbundled basis in order to induce a customer to purchase the rebundled service.

Finally, the Department notes that several LDCs argue that unbundling IS may be unnecessary and burdensome to LDCs as well as their customers. The Department therefore will entertain petitions for exemption, at the present time, from this requirement from those LDCs with limited resources to implement unbundling.

D. Pricing

1. Introduction

The Department's current IT pricing policy was developed in Gas Transportation, D.P.U. 85-178 (1987). In that case, the Department found that customers operating in the IT market segment were not simply in the natural gas market, but in a broader energy market which provided competing options. Id. at 43. Under these conditions, IT customers were deemed to be protected from the deleterious effects of monopoly gas pricing through the competition afforded by alternative energy sources. Id. Therefore, the Department found that VOS pricing was appropriate for IT service because it constituted the most appropriate and economically efficient way to allocate transmission and distribution capacity in a competitive environment. Id.; Transition Costs, D.P.U. 94-104-C at 24-25 (1995). Specifically, the Department now requires that the LDCs receive an equivalent per-unit

margin for both their IT service and IS service, based on the LDCs' corresponding IS rates less the WACCOG used to provide that service. Berkshire Gas Company, D.P.U. 89-112, at 107-108 (1989); Bay State Gas Company, D.P.U. 89-81, at 160-161 (1989). Consistent with its policy on IS service, the Department has required that IT service be subject to a floor price designed so that all avoidable volumetric costs are recovered. Gas Transportation, *supra*, at 41.

In authorizing LDCs to provide IT service, the Department has also required LDCs to maximize margins from IT. Commonwealth Gas Company, D.P.U. 87-122, at 291 (1987). This maximization does not require that each individual IT contract extract the maximum possible margin at all times, but rather that LDCs use their business judgment and expertise to maximize total IT margins over time. *Id.*

2. Positions of the Participants

The participants in this case propose the following IT pricing options: (1) a fully-allocated cost approach (TransCapacity); (2) a fixed IT rate derived from FT rates (DOER, MIG, and TEC); (3) a flexible IT rate available at the customer's option, in lieu of the FT-based IT rate endorsed above (DOER and North Attleboro);¹⁶ (4) a broad range of IT pricing options, including one based on the avoidable cost of bypass (MMWEC); (5) a flexible VOS-based approach (Attorney General); (6) an elimination of IT service in favor of a menu of QFT services (Boston Gas); and (7) a continuation of the existing VOS-based

¹⁶ While North Attleboro does not specifically advocate a change in IT pricing, its favorable comments towards flexible IT pricing puts the company in fundamental accord with DOER on this issue (Exh. DPU-29, at 1-2).

pricing framework (Bay State, Colonial, Commonwealth, Essex and Fitchburg).¹⁷ These proposals, as well as participants' comments on the current pricing system, are described below.

a. Cost-Based IT Pricing

TransCapacity opposes VOS pricing for IT service, contending that the goals associated with IT service, including providing maximum benefits to firm customers, are best met using a cost-based pricing approach (TransCapacity Brief at 2, 5). TransCapacity advocates the use of embedded cost of service/rate of return ("COS/ROR") methods to determine rates for each class of firm and interruptible customer, arguing that the existing system of margin passbacks provides improper incentives for LDCs in a competitive environment (Exh. DPU-30, at 5, 13).¹⁸ TransCapacity also asserts that if FT and FS service could be provided under the same terms of service as IT is currently provided, with contract durations as short as a single day, there would be no need for IT (*id.* at 3-4).

b. Fixed FT-Based IT Pricing

DOER and TEC consider the Department's existing IT pricing policy to be a major barrier to economic development and the development of gas-on-gas competition in Massachusetts (DOER Brief at 5; TEC Brief at 5). MIG and TEC contend that IT service

¹⁷ On brief, Berkshire expresses indifference as to whether IT should be VOS- or cost-based, but argues that any pricing structure should provide for sufficient pricing flexibility to allow a sale to be made with maximized margins (Berkshire Brief at 7).

¹⁸ While MIG also suggests the use of an IT-specific revenue requirement, it acknowledges the difficulties inherent in determining an IT revenue requirement (MIG Brief at 15).

provides a benefit to both LDCs and IT customers, in that LDCs receive cost-effective peak-shaving capacity during the winter and important revenues in the off-peak season, while their customers benefit from access to lower-cost gas (MIG Brief at 10; TEC Brief at 5). MIG assails the premise underlying VOS pricing, i.e., that IT customers are operating in a market where competitive alternatives exist, arguing that the existing IT price structure fails to recognize the development of gas-on-gas competition and is inconsistent with the market opportunities afforded by FERC Orders 436 and 636 (MIG Brief at 10-11). According to MIG, IT shippers do not have competitive alternatives, because (1) bypass options are not adequately available to gas-dependent industrial customers, and (2) LDCs continue to exercise market power by virtue of their monopoly control of gas distribution facilities (id. at 15-16). MIG points out that natural gas distribution remains a monopoly, and asserts that any meaningful competition for commodity and upstream services cannot be dependent upon a volatile VOS-pricing structure (id. at 17). MIG urges the Department not to adopt policies which constrain customers' ability to obtain third-party gas, and thus reverse the direction of the gas markets in the post-Order 636 world (id. at 10-11).

In order to take full advantage of the increasingly competitive gas markets, DOER, MIG and TEC propose the use of a fixed IT rate pegged to the FT rate (DOER Brief at 7; MIG Brief at 15; TEC Brief at 7-8). While the calculation of the fixed IT rate varies among these participants, they are in basic agreement that the price should be set based on the corresponding FT rate, using a load factor ranging between 100 percent and 200 percent, depending on the specific participant (DOER Brief at 7; MIG Brief at 15; TEC Brief at 7-8). Reasoning that IT service is inferior to FT, TEC contends that the IT rate should never

exceed the cost of FT at a 100 percent load factor (TEC Brief at 6).

Both Bay State and Colonial assert that the implementation of a cost-based IT service would create well-defined short-term losses in IT margins being returned to core customers through the CGAC, with no clear benefits (Bay State Brief at 6; Colonial Brief at 2). Both companies argue that in the past three years, they have earned and returned to firm customers significant levels of interruptible margins, which would not be available under a fixed IT rate option (Bay State Brief at 5-8; Colonial Brief at 4). Colonial further argues that cost-based pricing for IT would induce current IS customers to switch to IT service, further reducing the level of margins flowing through the CGAC to core customers (Colonial Brief at 4).

Bay State argues that if it were to price IT based on a 100 percent load factor FT rate, its summer IT rate would approach short-run marginal costs, thereby generating few or no margins for firm customers (Bay State Brief at 7-8, citing Tr. 5, at 11-12, 29-30). Bay State further argues that reduced IT prices would not increase throughput sufficiently to compensate for revenue losses under a hypothetical 100 percent load factor cap. Bay State notes that it would have to increase IT throughput by 22.6 million dekatherms to compensate for the \$3.5 million loss in interruptible margins that its customers would experience under an FT-based IT rate cap (id. at 6, citing Exh. DPU-65). Bay State particularly objects to the higher load factor caps of 100 to 200 percent proposed by DOER and TEC because of the company's seasonal firm rates.

c. Flexible FT-Based IT Pricing

As a complement to its proposed fixed FT-based IT price proposals, DOER proposes that customers also be permitted to negotiate a flexible rate set somewhere between the FT rate, using the actual FT class load factor, and an LDC's short-run marginal cost of providing IT service (DOER Brief at 7). DOER proposed that a contribution to fixed costs of approximately \$0.05 per MMBtu be added to this rate (*id.*). This, according to DOER, would provide choices for those customers for whom price stability is not a priority, as well as for those who possess market power (*id.*). North Attleboro also states that if the Department adopts a cost-based IT pricing structure, such rates should be capped at the corresponding FT rate, with the ability to flex down to short-run marginal costs (Exh. DPU-29, at 1-2).

Bay State opposes DOER's flexible FT-based IT rate for the same reasons as it opposes a fixed FT-based IT rate (Bay State Brief at 5). However, Bay State contends that if the Department desires to reduce IT rates, the use of actual FT class load factors in this pricing approach would have the least detrimental impact on core customers (*id.* at 7).

d. Variable IT Pricing

MMWEC argues that reliance on alternative fuels to discipline IT pricing serves to inhibit gas-on-gas competition at the city-gate, since alternative fuels define an upper price limit for IT instead of serving as a substitute (MMWEC Brief at 2-3). MMWEC further argues that IT pricing based on alternative fuels allows LDCs to charge different rates to different customers for what is essentially the same service (*id.* at 3). MMWEC urges the Department to direct LDCs to: (1) offer transportation service on a basis comparable to the

LDC's own use of the system; (2) post maximum IT prices; (3) permit IT pricing at a rate less than the per-unit cost to a customer of constructing a direct interconnection with a pipeline to bypass an LDC's distribution system; and (4) offer a broad range of FT, IT, and QFT services (id. at 3-4).

While Bay State agrees in principle with MMWEC's argument that IT can be priced by using a customer's equivalent cost of bypass, Bay State argues that this approach should be applied only on a case-by-case basis for customers who have a bona fide opportunity to bypass the LDC (Bay State Brief at 8).

e. Flexible VOS Pricing

The Attorney General argues that LDCs should be allowed to offer IT service options to customers that incorporate a variety of quality, duration, minimum-take, and rate design conditions (Attorney General Brief at 6). However, he contends that a floor price is needed to ensure that IT customers make a meaningful contribution to embedded costs associated with the LDC's distribution system (id.).

Additionally, the Attorney General advocates the adoption of minimum-take commitments. The Attorney General reasons that when an IT customer's burner-tip price of alternative fuel drops below its "floor" burner-tip price of gas, i.e., IT floor plus city-gate cost of supply, the customer is likely to stop taking IT service. However, if the alternative fuel price rises above the "ceiling" burner-tip price of gas, i.e., an IT ceiling price plus city-gate cost of gas, that customer is likely to continue taking IT service at the ceiling rate (id. at 7). The Attorney General contends that this sets up a "win-win" situation for IT users, but a "lose-lose" situation for LDCs and their firm customers (id.). In order to

prevent this "gaming" of the system by IT users, the Attorney General concludes that a minimum-take requirement is a necessary condition for the provision of IT service (id.).

f. Cost-Based QFT Pricing

Boston Gas proposes to replace its existing IT service with varying levels of FT service (Boston Gas Brief at 2).¹⁹ Boston Gas contends that because its system is designed to meet peak-day sendout requirements, customers who are able to deliver gas to the city-gate can receive firm transportation capacity, except on peak days (id. at 3). Boston Gas therefore concludes that IT service as traditionally envisioned does not exist on its system (id.). To reflect this operational condition, Boston Gas proposes to offer varying levels of FT service. Specifically, Boston Gas proposes a variety of QFT options, including 270-, 310-, and 340-day service (id.). The rates for this QFT service would reflect the number of days of service desired by the customer and the period for which the service is selected (id. at 3-4). Customers with competitive alternatives would pay a VOS-based transportation price, and customers without such options would pay a cost-based time-of-use rate (id. at 4-5).

Boston Gas' proposal also entails unbundling interruptible sales service at the city-gate (see Section II.B, above). A customer seeking interruptible service could arrange with either the company or a third party for gas deliveries to the city-gate at a negotiated rate, with Boston Gas providing QFT service as described above (Boston Gas Brief at 4).

¹⁹ Boston Gas' comments in this proceeding do not constitute a formal proposal before the Department; Boston Gas intends to file a specific proposal based on the Department's Order in this proceeding (Exh. DPU-107).

Colonial, DOER and MMWEC acknowledge that Boston Gas' proposal meets the needs of many potential transportation customers seeking a level of service tailored to their specific requirements. However, they argue that the elimination of IT service would reduce customer options and hence inhibit competition (Colonial Brief at 4; DOER Brief at 11; MMWEC Brief at 5-7). DOER argues that customer response to existing LDC service offerings for FT and QFT has been lacking because these rates allocate a disproportionate share of LDC distribution capacity costs to off-peak periods, contain overly-restrictive terms and conditions, and provide an inadequate menu of options for what would be lower-quality IT service (DOER Brief at 11-12). DOER asserts that the Department should make changes to IT pricing and policies now, since restructuring the FT pricing system would require additional hearings and produce unnecessary delays (*id.* at 13). MMWEC maintains that FT service is not available for peak-shaving purposes, an important role played by IT (MMWEC Brief at 6). Moreover, MMWEC points out that the lack of demand charges for IT service makes it attractive to customers who are willing to accept the risk of interruption in exchange for a purely commodity-based service (*id.* at 7).

Colonial acknowledges the concerns raised by some of the participants in this proceeding that VOS pricing results in unstable prices which are overly dependent upon oil prices (Colonial Brief at 3). In order to meet the particular requirements of those customers, Colonial proposes that LDCs implement additional cost-based QFT service options (*id.*). Quasi-firm service like the existing firm transportation service would be cost-based, but less expensive because quasi-firm service would not be available during the peak or shoulder periods (*id.*). However, Colonial disagrees with Boston Gas' proposal to replace IT service

with quasi-firm transportation service, reasoning that pure IT service allows both dual-fuel customers and LDCs to reap the benefits afforded by the spot availability of IT (id. at 4).

g. VOS-Based IT Pricing

Bay State, Colonial, ComGas, Essex, and Fitchburg support the continued use of VOS pricing for IT service. Bay State reasons that VOS pricing for IT is appropriate because: (1) IT customers make no direct contribution to an LDC's distribution system; (2) the ability of IT customers to fuel-switch based on alternative fuel prices makes IT revenues unpredictable and unreliable; (3) VOS pricing allows LDCs to charge a market-clearing rate for IT service and thus derive maximum benefits for firm customers; (4) VOS pricing is compatible with IT and IS, and promotes gas-on-gas competition; and (5) changes to the existing VOS pricing structure would come at the expense of firm customers, through both lower margins and a shift away from firm service (Bay State Brief at 3-4).

Bay State disputes the contention of some participants, including Boston Gas, that IT service can be offered on any day of the year, provided that the customer can get gas delivered to the city-gate (id. at 13). Bay State argues that the need for supplemental supplies during peak periods requires the termination of IT service in order to avoid the cost of those supplies (id.). Bay State contends that with city-gate supply services already sold on a competitive market basis, IT service also must be priced on a VOS basis in order to ensure that burner-tip gas cost is competitive with an IT customer's burner-tip alternative fuel cost (id. at 14).

While Colonial states that there is a direct conflict between the goals of promoting economic development in the Commonwealth and maximizing benefits to core customers, it argues that the conflict should be decided in favor of the core customer (Colonial Brief at 5). In advocating the retention of VOS pricing, Colonial notes that the participants who support lower IT prices have supplied no empirical evidence to support their claims that COS-based IT pricing would result in increased throughput on LDC systems or long-term economic benefits to the Commonwealth (*id.*). Colonial questions whether COS pricing would create real economic development, asserting that the DOER and industrial gas users were unable to provide any conclusive data to support their contention that the current VOS pricing system for IT is detrimental to the Massachusetts economy (*id.* at 5-6).

ComGas, Essex and Fitchburg support the continued use of VOS pricing for IT service as consistent with the Department's regulatory framework and its policy of maximizing total benefits to firm ratepayers (ComGas Brief at 7; Essex Brief at 15-16; Fitchburg Brief at 10). ComGas argues that, in the increasingly competitive energy marketplace, the continuation of VOS will ensure the efficient use of an LDC's distribution system in a way that both maximizes economic efficiency and maintains the needed reliability of service (ComGas Brief at 7). Essex contends that the current policy of pricing IT at a rate equal to the corresponding IS rate less the avoided cost of gas allows IT customers to determine readily whether they are able to acquire gas at a price less than that charged by the LDC (Essex Brief at 8). Fitchburg argues that because it has no obligation to provide IS or IT service, both IT and IS should continue to be priced under VOS principles (Fitchburg Brief at 10).

ComGas argues that if the Department were to replace VOS pricing with COS-based pricing, the following general principles must be followed: (1) sales must be permitted at less than fully allocated cost; (2) revenues from cost-based IT transactions must be treated outside the LDC's revenue requirement; and (3) the transitory nature of IT must be recognized (ComGas Brief at 7). ComGas maintains that given the competitive nature of the IT market, the Department should not predetermine or restrict the means by which IT price components are designed (id. at 8). Rather, ComGas believes the Department should rely on general principles in developing an IT policy, with particular emphasis on the concept that the Department should continue to pass IT margins through to firm customers via the CGAC (id. at 8-9). ComGas suggests that the Department can adequately oversee and safeguard the interests of firm customers with respect to IT policy through a base-rate proceeding or a semi-annual CGAC proceeding (id. at 8).

3. Analysis and Findings

In this section, the Department: (1) considers the merits of the IT pricing options put forth by the participants, including the role of QFT service in meeting IT demand; (2) directs LDCs to adopt specific policies concerning IT pricing; and (3) addresses implementation issues.

As the Attorney General and the LDCs point out, the Department's current requirement that IT service be priced on a VOS basis results from the assumption that an LDC's distribution system exists principally to serve the needs of firm customers.

D.P.U. 85-178, at 9. LDCs recover all costs associated with developing and maintaining the system through firm sales and transportation rates. Excess gas supply and distribution

capacity exist in the off-peak period only because firm customers have been allocated the full cost of developing those resources based on peak-period requirements. Therefore, under the regulatory framework the Department has developed, non-firm customers are allowed use of the system only to the extent that they provide the greatest possible benefits to firm customers. Boston Gas Company, D.P.U. 88-67 (Phase I), at 325 (1988).

The Department has mandated the use of VOS pricing for two reasons. First, the Department has found that VOS pricing more accurately reflects the competitive marketplace than a COS-based pricing system. The Department has found that interruptible customers operate not only in the natural gas market, but rather in an overall energy market which permits them to obtain the cheapest source of Btus among various energy sources. Thus, the regulatory imperative to discipline IT rates through cost-based pricing as a substitute for market forces is absent. D.P.U. 85-178, at 42-43.

Second, VOS pricing recognizes the value of system capacity to those customers seeking to use it on a less-than-firm basis. The Department's prescribed method for conducting allocated cost studies does not require that fixed costs be allocated to interruptible customers; any fixed costs incurred to serve an interruptible customer must be contributed or contractually guaranteed by that customer. To the extent that interruptible customers place additional costs on an LDC's system, firm customers have been compensated for these costs through the flowback of profit margins associated with interruptible service. D.P.U. 89-81, at 156 ; D.P.U. 85-178, at 38-39.

A rate for interruptible service based strictly on allocated costs, as proposed by TransCapacity, would yield a variable rate virtually equal to gas costs for sales service, or

nearly zero for transportation service. The Department finds that there is no justification to pricing off-peak distribution system capacity, a commodity with considerable value to IT customers, based on negligible allocable costs. Such a pricing scheme would produce windfall benefits to the IT customer and forego benefits for an LDC's customers. Accordingly, the Department declines to adopt an allocated cost method to establish IT pricing.

DOER and a number of end-user participants, including TEC and MIG, advocate setting IT prices at corresponding FT rates, with load factor adjustments to compensate for what they consider to be the lower quality of IT service. The Department has several concerns with this approach. First, an FT-based IT price structure would be inconsistent with the opportunity nature of IT transactions. Based on the Department's finding that IT service is an opportunity transaction, a fixed-price structure may fail to recognize the competitive markets in which IT service exists.

Second, the existing FT rates for a number of LDCs, including Bay State, Boston Gas, and Colonial, exhibit a considerable variation between summer and winter rates. Under these conditions, a 100 percent load factor-based rate could approach short-run marginal costs during the summer off-peak period, thus ignoring the value of IT service to IT customers and generating little or no benefit to firm customers. The use of higher load factors, as contemplated by TEC and MIG, would create further disparities by reducing IT prices below short-run marginal costs. As we noted above, such an IT pricing structure would allow IT customers to reap the benefits of discounted service, at the expense of firm users. While capping IT prices at the actual load factor for corresponding FT service, as

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suggested by Bay State, would mitigate the adverse effects of FT-based pricing, this pricing scheme would still be inconsistent with the opportunity nature of IT service.

Finally, an IT pricing system based on corresponding FT rates could lead to uneconomic customer migration from firm sales and transportation to IT, thus burdening the remaining core customers with an increased share of infrastructure costs. The additional IT margins generated by incremental IT transactions likely would be inadequate to mitigate the impact of this burden. Resulting rate hikes would exacerbate the trend, and eventually impair an LDC's ability to attract and maintain capital. Such a scenario runs directly counter to the Department's overall goal of maintaining the long-term stability and efficiency of the local distribution system.

With specific reference to DOER's proposal that customers be given the option of selecting either a fixed or a flexible IT price, the Department is concerned that a fixed-price IT option would have limited value to customers. As Bay State correctly notes, such a fixed price structure would generally appeal to those customers with a high alternative fuel price, such as No. 2 fuel oil. Customers with expensive alternative fuels have demonstrated through their decisions to invest in dual-fuel equipment that they desire the flexibility to elect the cheaper energy source available. If a customer is permitted to "game" its decisions to switch between a fixed and a flexible IT price, the fixed rate option would be rejected in favor of flexible IT rate. The Department notes that, to the extent that an IT customer values price stability, this should be negotiated by the parties in a way that is compatible with an LDC's other service offerings, including firm sales, FT, and IS. While the Department acknowledges that there may be some potential IT users who desire a measure of

price stability, such provisions could be negotiated on an individual basis.

With respect to Boston Gas' proposal for a variety of QFT service offerings, the Department finds considerable merit in the expansion of QFT service. Depending upon an individual customer's needs, it is possible that a QFT rate can be designed to meet the customer's requirements. However, Boston Gas' proposal fails to recognize fully the potential benefits of an opportunity-driven IT service. The record demonstrates that a demand exists for lower-quality IT service for those customers in processing operations and for those with dual-fuel capability (Exhs. DPU-18, at 1; DPU-19, at 3; DPU-25, at 4-5; Tr. 2, at 58-59; Tr. 4, at 23-24). Without pure IT service, dual-fuel customers would be deprived of the potential benefits of receiving gas during peak periods when QFT service is not otherwise available, and would be unable to fuel-switch on short notice based on price considerations, which may be the greatest benefit of pure IT. For these customers, the opportunity nature of IT transactions is better represented by the commodity-based IT rate structure, versus the demand-based QFT rate structure. While we encourage LDCs to take advantage of market opportunities through the development of QFT menus which provide the greatest benefit to customers, we find that pure IT service should remain an option to those customers desiring the service.

Based on the foregoing, the Department concludes that IT service remains an opportunity-driven transaction, and that it is inappropriate to price IT service under cost-based principles. Accordingly, the Department finds that IT service shall continue to be priced, for the present, using VOS principles.

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We now turn to the issue of whether any modifications to the current VOS pricing regime are necessary. While the Department adheres to the principle of VOS pricing, we are cognizant of the impact of VOS pricing policies on the IT market and the ongoing ability of LDCs to earn the largest total amount of interruptible margins from a stable and diversified customer base. As we previously have noted:

The Commonwealth's gas LDCs will have won a hollow victory for their firm ratepayers if they extract such high margins on interruptible sales and transportation throughout the 1980s that, by the 1990s, Massachusetts industrial customers, wearied by their inability to obtain any meaningful savings in energy costs relative to alternative fuels, have shifted their operations to other states or even other continents.

D.P.U. 88-67 (Phase I), at 332.

A fundamental shift has occurred in the interruptible market since 1987. Changes in the natural gas industry, including FERC Orders 436 and 636, have expanded the alternative fuel market beyond the traditional confines of fuel oil. Additionally, the record strongly demonstrates that reliance on fuel oil markets to establish IT pricing policies leaves IT service at the mercy of the vicissitudes of oil markets (Exh. DPU-25, at 7-8; Tr. 1, at 17, 67; Tr. 4, at 27). See also Re Public Service Electric and Gas Company, 116 P.U.R. 4th 202 (1990). Indeed, gas-on-gas competition, as exemplified in Bay State Gas Company, D.P.U. 91-172 (1991), has increased to the point where the current VOS-based IT pricing structure warrants reexamination.

An evaluation of the current relationship between IT and IS service is integral to the Department's analysis of IT pricing. As noted in Section II.A, above, IT pricing is modeled on IS pricing. However, this comparison warrants reexamination in light of today's energy

markets. With limited exceptions, IS service is premised on the concept that a customer's alternative fuel is oil. However, this fails to account fully for the development of gas-on-gas competition. See D.P.U. 91-172, *supra*. Moreover, we now view IT service as conceptually different from IS service. The availability of IS service is limited by both the amount of gas that an LDC has under contract to serve its firm customers and the constraints of its distribution system; if an LDC has gas available for sale in excess of firm requirements and no distribution system constraints, it can provide IS service. However, the availability of IT is limited only by the capacity of an LDC's distribution system. If an IT customer can have its own supplies shipped to an LDC's city-gate, IT service is still subject to local constraints which may prevent delivery to a customer's location (Exhs. DPU-68; DPU-99; DPU-189).²⁰ Thus, the "direct parallel" between IS and IT perceived in D.P.U. 85-178 is no longer accurate.

The Department has carefully considered the positions and arguments raised by the participants in this proceeding. A market-based solution to IT pricing must recognize the opportunity nature of IT transactions. In addition to this consideration, the Department has found that the present link between IT and IS pricing fails to properly recognize the role of gas-on-gas competition in today's energy markets, or the operational differences between the two services. Based on the considerations and analysis above, the record in this proceeding, and our review of the alternative IT pricing proposals set forth by the participants, the

²⁰ Although Boston Gas claims that year-round transportation is possible on its system, it concedes that this may not be possible if system constraints affect the integrity of the system (Exh. DPU-7, at 6; Tr. 6, at 16-17).

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Department finds that a flexible VOS-based IT pricing structure which follows the Attorney General's proposal, with the modifications described below, most closely satisfies these conditions.

The VOS features of the Attorney General's flexible approach properly recognize the opportunity nature of IT transactions, while at the same time acknowledging the role of gas-on-gas competition in a customer's selection of energy options. The use of a floor price that, at a minimum, covers the variable cost of providing IT service, would prevent the subsidization of IT service by firm customers, thereby encouraging the development of gas-on-gas competition. LDCs would be able to vary the price above this floor, depending on prevailing market conditions and individual customer options, and thus enter into mutually advantageous transactions that benefit the IT user.

With respect to the capping of IT prices at FT-based rates or some other limit, the Department has noted above that there are significant differences between FT and IT service. Consequently, there is no comparability between the one-day equivalents of FT and IT service, and no basis on which to conclude that FT rates would constitute an appropriate IT price cap. In addition, this Order retains IT, at least for the time being, as a VOS-based service. Accordingly, the Department finds it unnecessary to impose a ceiling price on IT service.

A number of participants, including the Attorney General and DOER, favor requiring a fixed contribution above variable costs towards embedded costs. To the extent that IT transactions produce contributions towards embedded costs, firm customers will benefit as well. However, the Department acknowledges that, at times, market conditions may not

justify a fixed contribution level per MMBTu. Accordingly, the Department shall not require a predetermined level of contribution from IT customers towards embedded costs. Instead, we encourage LDCs to negotiate an appropriate contribution. This Order sets forth an interim incentive mechanism to encourage LDCs to pursue the acquisition of this contribution. The Department notes that a long-run incentive mechanism could be incorporated into an incentive rate proposal filed in a manner consistent with the requirements of Incentive Regulation, D.P.U. 94-158 (1995).

We do not concur with the Attorney General's proposal that minimum-take commitments be incorporated into IT service agreements. While such commitments may be negotiable between an LDC and a potential customer on an individual basis, a minimum-take requirement confers a quasi-firm status on what is otherwise a pure opportunity transaction. It would be inconsistent to demand a specific gas commitment from a party who seeks to take advantage of market opportunities. While the Department acknowledges the Attorney General's concern over "gaming" of an LDC's system by a customer, the VOS pricing modifications being established in this proceeding are intended to make IT transactions more competitive with alternative fuels, and thus reduce customer incentive to "game" the system to their advantage. Accordingly, the Department finds it unnecessary to impose any requirements with respect to minimum-take commitments.

While we concur with the LDCs that fewer total margins may be flowed back to firm customers under this pricing structure, we note that the impact varies by LDC (Exhs. DPU-55; DPU-87; DPU-124; DPU-149; DPU-177; DPU-214; DPU-241). The Department emphasize: the need for LDCs to engage in IT transactions that produce

long-term benefits to firm customers. By way of example, the Department has noted that, under some conditions, it is preferable to keep an interruptible customer on line regardless of day-to-day cost fluctuations. D.P.U. 88-67 (Phase I), at 331-332. Additionally, the Department has directed LDCs to consider the decision-making time-frame of an IT customer, and take into account that customer's particular fuel choices and investment decisions. Id. at 330. LDCs providing IT service should not become so concerned with short-run margin levels that the loss of IT load and its associated benefits becomes a self-fulfilling prophecy.

In summation, the Department finds at this time that IT service shall continue to be priced on a VOS basis; with the following modifications. Interruptible transportation pricing shall not be linked to current IS pricing and shall recognize that customer alternatives are not limited to fuel oil. While the Department finds that no ceiling price for IT is necessary, a minimum floor price shall be established, representing the individual LDC's marginal variable cost of providing IT service. The Department further finds that no minimum-take commitment is necessary or appropriate for IT service. All LDCs are hereby directed to file standard-offer IT contracts consistent with the directives contained in this Order, as further described in Section V, below.

E. Terms and Conditions

1. Introduction

In its initial request for comments, the Department asked participants to comment on the terms and conditions for interruptible transportation that should be addressed in this docket. During the course of the proceeding, the discussion focused on two specific

elements: (1) the requirement for dual-fuel capability; and (2) notification of interruption.

2. Positions of the Participants

There is considerable disagreement among participants in this proceeding as to whether IT customers should be required to demonstrate dual-fuel capability as a condition of service. The industrial participants argue that neither the LDCs nor the Department have the authority to require IT customers to install alternative fuel equipment, and that such a requirement should not be included in the terms and conditions of interruptible services (Exh. DPU-25, at 19; MIG Brief at 22-23; Exh. DPU-18, at 11). DOER asserts that, although most customers seeking interruptible service should have alternative fuel capability, they should be offered the option of petitioning for exemption from a dual-fuel requirement (Exh. DPU-16, at 21). LDCs argue that removing the dual-fuel requirement from the terms and conditions for IT would impose an undue burden on LDCs (Exh. DPU-11 at 7; Tr. 2, at 43-45; Tr. 3, at 23-25). Colonial strongly argues against removing the dual-fuel requirement clause, asserting that political pressures may force LDCs to provide IT customers with firm service at the expense of firm customers (Tr. 3, at 24).

Regarding notification of interruption, MIG is the only participant who suggests that IT customers should be provided with advance notice of periods during which service would be curtailed. MIG asserts that LDCs can pinpoint these periods, based on their historical load and weather experiences (Exh. DPU-25, at 9).²¹

²¹ The Department notes that certain operating conditions, independent of historic load and weather conditions, may require an LDC to cease provision of interruptible service. In addition, the Department notes that, when an LDC identifies the exact

(continued...)

Some participants stated that terms and conditions for IT need not be specified in this proceeding (see, e.g., Essex Brief at 14; TEC Brief at 8). Instead, they suggest that the Department should address certain concerns, such as the requirement for dual-fuel capability and notification of interruption, and allow the LDCs to tailor their terms and conditions to the specific needs of an individual LDC's territory and the operational constraints of each LDC's system (Essex Brief at 14; TEC Brief at 8; Exh. DPU-1, at 29).

3. Analysis and Findings

The participants in this proceeding disagree on the need for a requirement of dual-fuel capability for IT customers. The Department strongly endorses the principle that IT customers must be willing and able to cease taking gas whenever an LDC requires them to do so. Further, the Department appreciates the arguments of certain LDCs that a dual-fuel requirement would promote the efficient delivery of IT while ensuring that firm customers do not subsidize interruptible customers. LDCs should be allowed to require customers to procure equipment that is essential for the delivery of gas to the customers' burner-tips. Such equipment may include metering equipment or other system upgrades necessary for the efficient operation of the distribution system and for the safe and efficient delivery of gas. As a general principle, however, LDC customers must be allowed the discretion to allocate funds for their capital investments in a way that allows them to maximize the benefits of such

²¹(...continued)

dates of service interruption in advance, it is providing less than 365-day firm transportation service, not IT service. Accordingly, the Department will not require LDCs to provide advance notice to IT customers of which periods service would be interrupted.

investments. The Department finds that a dual-fuel capability requirement is not necessary to ensure the efficient operation of the distribution system or the safe and efficient delivery of gas to interruptible customers. Therefore, the Department directs LDCs to develop terms and conditions which do not incorporate a requirement for dual-fuel capability. However, the Department expects that LDCs will propose a set of criteria to be met by IT customers, to demonstrate that they are capable of either ceasing operations or switching to an alternative fuel if IT is not available on the LDC's distribution system. Additionally, LDCs should develop reasonable charges or other penalties that would deter the unauthorized use of the distribution system by interruptible customers.

The Department concurs with those participants who suggest that LDCs should be allowed to propose terms and conditions that accurately reflect the operational constraints of their systems. The proposed terms and conditions for IT will be reviewed in individual LDC filings, in order for the Department to determine whether they are reasonable and appropriate, and whether they enable customers to benefit from the LDC's IT service.

III. CAPACITY RELEASE

A. Introduction

- Capacity Release ("CR") is the assignment, allocation, or release of firm transportation rights to another party, authorized by FERC Order 636. Such release may be made on a permanent or temporary basis, either by posting the capacity for bid on an interstate pipeline's electronic bulletin board ("EBB"), or through a pre-arranged agreement.

The participants in this case approach CR issues from fundamentally different perspectives. The LDCs, without exception, regard CR as one of a number of tools to be

used in managing their supply portfolios and mitigating the cost of the interstate pipeline capacity which they hold to serve their firm sales customers (Essex Brief at 16; Colonial Brief at 9-10; Bay State Brief at 17; Berkshire Brief at 10; ComGas Brief at 9; Fitchburg Brief at 6). They argue that they have a responsibility to these customers to maximize the return on "slack" capacity (capacity not being used at a particular time to serve firm sales customers) through a combination of IS, off-system sales ("OSS") and CR (Colonial Brief at 14; Bay State Reply Comments at 17; Berkshire Brief at 12; ComGas Brief at 9). They believe that the Department should limit its action on CR to determining (1) how revenues from IS, OSS, and CR transactions should be treated, and (2) what incentives should be used to promote optimal LDC use of capacity (see, e.g., Colonial Brief at 10). The Attorney General shares the LDCs' view of CR as a portfolio management tool (Exh. DPU-1, at 22-27).

The second perspective, held by DOER, end-user advocates, and LDC competitors, focuses on CR as a critical component of a developing competitive market in natural gas. To a greater or lesser extent, this group argues that the Department should mandate that LDCs release some or all of their slack capacity so that competing marketers can use the capacity to deliver gas to end-users (see, e.g., Exh. DPU-16, at 18). Some members of this group focus on short-term, month-to-month releases of capacity (id.), while others request that LDCs assign capacity on a long-term or permanent basis to departing sales customers (see, e.g., MIG Brief at 28-29). This second perspective assumes that interstate pipeline capacity to an LDC's city-gate is not readily available unless the LDC releases capacity.

In the following sections, we consider the issues raised by the participants. In Section III.B the Department discusses capacity assignment and related competitive issues. In Section III.C the Department addresses short-term capacity release. Finally, in Section III.D the Department considers whether it should play any role in the exchange of information regarding LDC capacity that is available for release.

B. Capacity Assignment

A number of participants made proposals regarding the long-term or permanent assignment of capacity to an LDC's departing firm sales customers. In this section, the Department considers the appropriateness of requiring such assignments.

1. Positions of the Participants

MIG proposes that a firm sales customer converting to unbundled LDC transportation service should be permitted to take assignment of a commensurate amount of released LDC capacity, which could consist of more than pipeline capacity (Exh. DPU-9, at 18; MIG Brief at 28-29).

In response, ComGas argues that as long as an LDC has an obligation to serve firm customers at the lowest reasonable cost, it would be imprudent for that utility to release capacity permanently unless a cost-benefit analysis indicates that the release would provide net benefits over a long-term planning horizon (Exh. DPU-181). ComGas also contends that it is difficult to determine the pipeline segments or general resources that are used to serve a particular customer, since firm customers are served by a portfolio comprised of storage, long-haul transportation, liquified natural gas ("LNG") supplies and other types of supply (Tr. 3, at 121-123).

Boston Gas asserts that permanently releasing pipeline capacity to customers converting from firm sales to transportation would be inappropriate unless an LDC first establishes that (1) the capacity would not be needed to meet design load, (2) the credit from the release would be higher than the replacement cost of the capacity, and (3) the release would not affect system reliability (Exhs. DPU-7, at 3; DPU-128). Boston Gas asserts that, in New England, firm customer requirements are served by a combination of pipeline capacity, LNG and propane facilities (Exh. DPU-7, at 3). According to Boston Gas, a permanent release of interstate pipeline capacity to departing customers in this situation would leave the remaining firm sales customers stranded with the higher cost of supplemental fuel (id.).

2. Analysis and Findings

The permanent release of unneeded capacity, where appropriate, can lead to a more efficient utilization of the interstate pipeline system by the LDCs and promote gas-on-gas competition. The Department will use its review of forecast and supply plans as well as its review of LDC capacity acquisitions to ensure that the pipeline capacity retained by an LDC is needed to serve firm demand.

The Department supports in principle the permanent release of some level of interstate pipeline capacity and other types of capacity held by LDCs as part of a broader proposal to unbundle LDC services further; however, MIG's specific proposal for long-term release of capacity to firm sales customers converting to transportation service is beyond the scope of this proceeding. The Department recognizes that determining the appropriate volumes and types of capacity to release to departing sales customers may be difficult. Nonetheless, the

Department expects LDCs to present proposals for capacity assignment programs as part of ongoing service restructuring.

C. Short-Term Capacity Release

Certain participants suggest that the Department require LDCs to release all excess capacity on a month-to-month basis, and to post all capacity releases, including releases for less than 30 days, on the interstate pipeline's EBB. The Department considers the appropriateness of these recommendations below.

1. Positions of the Participants

DOER and TEC regard Department oversight of CR transactions as an essential element of their proposed strategies for unbundling LDC interruptible sales service. Each recommends that the Department require Massachusetts LDCs to release all capacity in excess of that needed to serve their firm customers (Exh. DPU-16, at 15; Exh. DPU-18, at 14).

Under DOER's proposal, LDCs would be required to post all their excess capacity for release on a monthly basis and reacquire it on the open market as a precondition for making interruptible sales (Exh. DPU-16, at 18). An LDC which did not post all its excess capacity for release would not be allowed to recover through the CGAC the cost of the capacity used to make interruptible sales (*id.*). DOER argues that such a requirement is necessary in order to establish a market value for interstate pipeline capacity used to make interruptible sales, to ensure that the capacity is used by those who value it most, and to maximize CR credits to firm customers (*id.* at 15, 17). DOER also argues that its proposal would level the playing field by making available to customers and marketers all capacity not needed for firm service

to LDC sales customers (id. at 19).

In addition, DOER proposes that all prearranged capacity releases priced below the maximum rate should be posted for bid on the interstate pipelines' EBB system (id. at 14). Although FERC does not require posting of prearranged deals that either are less than a month in length, or are priced at the pipeline's maximum rate, DOER argues that a more stringent posting requirement would test the reasonableness of the deal, limit discrimination, and possibly increase revenues to firm customers from CR (id. at 14-15). DOER also encourages the Department to establish its own posting or notification system to make Massachusetts customers aware of Massachusetts capacity available for release (id. at 15).

In response to DOER's specific proposals, Colonial notes that they are intended (1) to make capacity available to marketers and (2) to establish a value for capacity (Colonial Brief at 12). However, Colonial asserts that the record does not show either that marketers cannot currently obtain capacity to serve their customers, or that the value for capacity established by current market transactions is too high (id.). In addition, Colonial argues that the policies proposed by DOER would reduce the revenues flowing to firm customers through the CGAC to offset high interstate pipeline capacity costs (id. at 14).

Essex asserts that if LDCs were required to release all of their slack capacity, that capacity would flood the market and reduce the value of released capacity. Essex notes that DOER's witness agrees that this situation could arise (Essex Brief at 17, citing Tr. 4, at 73-74).

2. Analysis and Findings

DOER's proposal to require the monthly release of all excess LDC capacity is intended to promote competition in the interruptible gas market by (1) making additional capacity available to deliver interruptible supplies to an LDC's city-gate, and (2) determining a market value for released capacity that can be used in unbundling IS service.

An analysis of DOER's proposal requires the Department to determine whether there is a shortage of capacity available to serve the interruptible gas market in Massachusetts. The Department has considered the information supplied by the LDCs regarding CR transactions between June 1993 and October 1994. The record indicates that the revenue which LDCs received for short-term capacity releases of the type that would be regulated under DOER's proposal, generally was less than 30 percent of the maximum allowed during the traditional interruptible season of March through October (see Exhs. DPU-57; DPU-89; DPU-126; DPU-151; DPU-179; DPU-216; DPU-243). Even during the winter months, LDCs generally have not received the maximum-allowed rate for short-term releases (id.). If this type of capacity were both desirable and in short supply, we would expect the prices to be higher. Thus, the Department concludes that there does not appear to be a high demand for the month-to-month capacity releases proposed by DOER.

The average prices for releases of over 30 days for the same period appear somewhat higher (see Exhs. DPU-58; DPU-90; DPU-127; DPU-152; DPU-180; DPU-217; DPU-244). To date, Massachusetts LDCs have not demonstrated an eagerness to engage in longer-term releases, even with recall rights. The Department encourages such multi-month releases, both to maximize revenues for firm customers and to make released capacity available to

market participants for longer periods. However, since DOER's proposal requires the evaluation and release of capacity each month, it will not encourage multi-month releases.

Consequently, the Department will not require, at this time, LDCs to post all slack capacity for release. Such a requirement would interfere with the LDCs' management of capacity which they hold on behalf of their firm customers, without appreciably improving competition in the interruptible market. The Department also rejects DOER's proposal that Massachusetts LDCs be required to post all prearranged capacity releases below the maximum rate on the interstate pipelines' EBB system. FERC has determined, and may continue to revise from time to time, the conditions under which interstate capacity should be released; any additional state-mandated restrictions on LDCs attempting to release capacity would put Massachusetts LDCs at a disadvantage in the competitive CR market.

D. Information Exchange

1. Introduction

The Department requested that participants comment on whether there is a need for an exchange of information regarding capacity available for release, beyond that provided by the existing pipeline EBBs developed in response to FERC Order 636. The responses of participants, addressed below, vary depending on their needs and their experience with the current EBBs.

2. Positions of the Participants

DOER and Boston Gas express support for a statewide EBB which would facilitate the transfer of information and provide Massachusetts customers with a fair opportunity to arrange or bid for capacity (Exhs. DPU-16, at 15; DPU-7, at 20). Essex states that the

benefits of an additional EBB are doubtful because it may be duplicative and burdensome (Exh. DPU-21, at 18). Berkshire states that the implementation of a statewide EBB would be costly, inefficient and redundant (Exh. DPU-5, at 20).

3. Analysis and Findings

Most of the LDCs have expressed their frustration with the difficulty of dealing with the plethora of EBB platforms operated by the various pipelines. This variety of platforms has led to the establishment of the Gas Industry Standards Board, whose task is to standardize the EBB interfaces. The Department notes that there is no consensus among the participants on the need for a statewide EBB. The Department concludes that a statewide EBB, operating in addition to the existing pipeline EBBs, would be duplicative and would not contribute to a more efficient market. Accordingly, the Department will not mandate the development of an additional statewide EBB at this time.

IV. RATEMAKING TREATMENT

A. Introduction

The Department's current ratemaking treatment of revenues associated with IT service and CR is rooted in the historical ratemaking treatment accorded to IS margins. Consistent with the Department's IS policy, which recognizes that firm customers traditionally have borne the cost of all the excess capacity used in IT or IS transactions, the Department generally has required LDCs to credit all profits associated with IT service to firm customers through the operation of the CGAC. D.P.U. 85-178, at 60-62. See also D.P.U. 89-81, at 156.

In more recent cases, the Department has recognized that the regulatory policy of

requiring the return of all such margins to firm customers tends to serve as a disincentive to LDCs seeking to make investments that are in the public interest. We have accepted margin-sharing arrangements as a tool for building interruptible load and thus providing potential benefits to customers over and above the cost of such incremental investments. Boston Gas Company, D.P.U. 93-60, at 323-326 (1993); Commonwealth Gas Company, D.P.U. 91-60, at 98-99 (1991). Accordingly, the Department has approved certain IT margin-sharing arrangements between LDCs and their customers. Essex County Gas Company, D.P.U. 93-107, at 4-7 (1993); Colonial Gas Company, D.P.U. 93-78, at 8-9 (1993); D.P.U. 93-60, at 326. The Department has also approved settlements which provide for a sharing of revenues associated with CR transactions between LDC shareholders and customers. See D.P.U. 93-107, at 4-7; D.P.U. 93-78, at 8-9.

B. Positions of the Participants

The positions of the participants in this proceeding regarding the issue of ratemaking treatment for IT and CR fall into three categories. First, the Attorney General proposes placing LDCs at risk for at least a portion of IT revenues. Second, a number of participants, including Berkshire, Boston Gas, DOER, DOMAC, Essex, MMWEC, and TEC, favor a generic policy of sharing IT and CR margins between the LDCs and firm customers. Finally, Bay State, Colonial, and Fitchburg favor maintaining the existing company-by-company framework, while incorporating the precepts laid out in Incentive Regulation, D.P.U. 94-158 (1995).

The Attorney General contends that LDC management and shareholders should bear the risk of managing capacity acquired for sales to firm customers but ultimately sold in the

IT, CR, IS, and off-system markets (Attorney General Brief at 4). Therefore, the Attorney General recommends that the cost of capacity be recovered from firm customers either at a fixed level set in base rate proceedings or at a non-reconcilable level set in the CGAC (id.). Berkshire and ComGas oppose the Attorney General's proposal to impute IT margins in base rates because of the variability of IT revenues (Berkshire Brief at 13-14; ComGas Brief at 7).

A number of participants favor a standardized arrangement for sharing IT margins between an LDC and its firm customers. Berkshire and Essex argue that the ratemaking treatment of margins collected from IT service should be identical to that adopted for CR, IS, and off-system sales (Berkshire Brief at 13; Essex Brief at 19). Essex proposes that these margins be shared between the LDC and firm customers (Essex Brief at 19). Berkshire proposes that a base level of margins be passed directly to firm customers, with any amounts above that predetermined level to be shared equally between an LDC and firm customers (Berkshire Brief at 13).²²

Similarly, DOER, DOMAC, MMWEC and TransCapacity contend that the ratemaking treatment for IT, CR, and off-system sales should be identical both within an individual LDC and between LDCs (DOER Brief at 27-28; DOMAC Brief at 5; MMWEC Brief at 11-12; TransCapacity Brief at 7). DOER contends that company-specific policies would create confusion for gas marketers in Massachusetts (DOER Brief at 28). MMWEC

²² Colonial initially advocated a generic margin-sharing arrangement of revenues associated with IT, IS, CR, and off-system sales between LDCs and customers (Exh. DPU-11, at 19). As noted below, Colonial now urges that any margin-sharing arrangement adopted in this proceeding not conflict with the need for broad-based incentive programs addressed in D.P.U. 94-158 (Colonial Brief at 13-14).

and TransCapacity argue that in order to resolve the disparate views of the LDCs and to prevent segmentation of the gas market, a standard policy is necessary for all LDCs (MMWEC Brief at 11-12; TransCapacity Brief at 7). In contrast, MIG proposes that the Department use this proceeding to establish generally applicable standards and require each LDC to comply or to demonstrate why specific aspects of the general policies are not appropriate in its individual case (MIG Brief at 25).

Boston Gas proposes separate ratemaking treatment for upstream and downstream services. It proposes that margins collected downstream, primarily associated with IT transactions, should be accorded traditional ratemaking treatment (Boston Gas Brief at 5). Margins collected from competitive upstream services, such as IS at the city gate, CR and OSS would be shared between the LDC and its firm customers through a mechanism identical to the one approved in D.P.U. 93-60, which permitted Boston Gas to retain 25 percent of margins earned in excess of those margins historically earned (id.).

Bay State and Fitchburg note that while some LDCs retain some margins associated with IT, CR, and off-system sales, other LDCs return all of these margins to firm customers (Bay State Brief at 19; Fitchburg Brief at 14-15). They contend that the record in this case is not sufficiently developed to warrant a change to existing ratemaking policies, and therefore they favor addressing these issues on a case-by-case basis in a manner consistent with the Department's findings in Incentive Regulation (Bay State Brief at 19-20; Fitchburg Brief at 14). Similarly, Colonial recommends that any guidelines issued by the Department on ratemaking treatment of margins not preclude the implementation of broad-based incentive mechanisms being considered under D.P.U. 94-158 (Colonial Brief at 14).

C. Analysis and Findings

1. Benefits of Margin Sharing

Capacity management tools, including IT, IS, CR, and off-system sales, are used during times when supply and distribution resources exist beyond those levels necessary to meet firm demand. The Department has recognized that these excess resources exist in off-peak or non-peak periods only because firm customers already have been allocated the full cost of developing those resources based on peak-period requirements. IS transactions are possible only during times of excess system supply, other transactions, including IT and CR, occur when an LDC has distribution or pipeline capacity available to meet demands in excess of core customer requirements.

As stated earlier in this Order, the Department has acknowledged that the regulatory policy of requiring all margins derived from these capacity management tools to flow to firm customers can result in a disincentive for LDCs seeking to make investments that are in the public interest. As a result, the Department has accepted margin-sharing arrangements as a mechanism for building interruptible load, and has approved settlements that provide for the sharing of revenues derived from CR transactions. The Department continues to recognize that existing regulations may inhibit a gas company from taking advantage of economic opportunities in the market, and that when utilities are given a financial stake in improved efficiency and a greater share of the resulting cost savings, real benefits to customers can be achieved. See Incentive Regulation at 47-52; D.P.U. 91-60, at 98; D.P.U. 85-178, at 60-62. Although an LDC's primary obligation is to provide reliable service to its core customers, the ability to take advantage of market opportunities would allow it to generate additional

margins that could reduce the average cost of service to firm customers.

The Attorney General has correctly pointed out the need to hold LDCs accountable for their capacity-related decisions. Such accountability should place the reward and risk of actions taken by LDC management on the decision-makers, and provides LDCs with a greater direct financial incentive to meet and exceed revenue targets. However, the Attorney General's proposal to impute a threshold level of IT revenues in general rate proceedings is flawed. The proposal is reminiscent of traditional command and control structures used to influence LDC behavior under COS/ROR-based regulation and is therefore inconsistent with the Department's long-term goals of relying on market forces to encourage utilities to take advantage of market opportunities. See Incentive Regulation at 9-10. Additionally, the imputation of margins in base rates would leave LDCs at risk for factors beyond their control, including weather and alternative fuel prices.

In contrast, margin-sharing arrangements offer symmetrical benefits to LDCs and their customers, because to the extent that margins are increased, they are passed back to customers through the CGAC. To the extent that IT revenues and margins do not increase, neither an LDC nor its customers receive benefits. The Department finds that the presence of these symmetrical benefits provides sufficient incentive for LDCs to maximize IT and CR margins. Further, margin-sharing on IT and CR transactions could mitigate the loss of firm heating sales revenues during warmer-than-normal peak periods, thus enhancing an LDC's financial stability. Accordingly, the Department finds that margin-sharing arrangements are preferable to margin imputation as a means of ensuring LDC accountability for capacity-related decisions, and that such margin-sharing arrangements are reasonable and in

the public interest.

Currently, most LDCs are required to flow back to firm customers all margins associated with IT, IS, and CR transactions. This full passback of IT margins, coupled with the price and volume volatility associated with IT transactions, tends to reduce the incentive of LDCs to take full advantage of market conditions and make IT-related investments which may produce benefits for firm customers. Similarly, a required passback of all revenues derived from CR transactions tends to reduce the incentive of LDCs to market their excess capacity aggressively. As a result, LDCs may forego the potential benefits to firm customers arising from CR transactions that reduce their average unit-capacity cost. The Department notes that while IT service currently functions as an opportunity-driven service, the continuation and expansion of margin sharing may give rise to market-driven innovations in IT service, and the possibility that IT service will develop more fully into a service in its own right. Similarly, sharing of CR margins between an LDC and its customers may provide LDCs with an incentive to consider seriously more aggressive capacity releases, as well as longer-term releases.

The Attorney General, Bay State, Berkshire, Boston Gas, Colonial, DOER, DOMAC, Essex, MMWEC, and TEC express on brief their support for some type of margin sharing between an LDC and its customers. Consistent with our findings in Section II.A, above, that IT service currently functions as an opportunity service, the Department finds that the bulk of margins associated with IT and IS should continue, at least for the present, to flow back to an LDC's firm customers. Similarly, the role of CR in the efficient utilization of interstate pipeline capacity, as noted in Section III.B.2, above, leads us to conclude that the bulk of CR

revenues should continue to be passed to firm customers.

While the Department recognizes the potential benefits of margin sharing, direct margin-sharing arrangements as envisioned by the majority of participants represent a targeted incentive of the type generally discouraged in Incentive Regulation at 20-21. In that proceeding, the Department found that broad-based incentive mechanisms are more consistent than targeted incentives with the transition to a competitive marketplace; however, it did not rule out the use of targeted incentives which complement a comprehensive plan. Incentive Regulation at 20-21, 62-63. Companies seeking approval of targeted incentive mechanisms are required to identify the specific policy objective which the targeted incentive is intended to promote, demonstrate why a broad-based proposal fails to meet those particular needs, and show that any inconsistency between the targeted incentive and the overall goals of the broad-based proposal is minimized. Id. at 63.

LDCs need to develop and implement their respective broad-based incentive proposals in a manner consistent with that described in D.P.U. 94-158. In the interim, the Department will permit margin-sharing arrangements to continue until the filing of an LDC's general rate case or performance-based rate proposal.

In the sections below, we discuss (1) the customer classes that should receive margins for each type of transaction, (2) the threshold which LDCs must reach before they are allowed to retain any margins, and (3) the percentage of margins above that threshold which LDCs will be allowed to retain.

2. Allocation of Margins

The Department rejects the proposal for a uniform system of margin allocations for IT, IS, and CR, since the costs of the underlying resources used to provide these services are allocated to different customer groups. Interruptible transportation service can be provided only when distribution system capacity is available; margins from IT should therefore be returned to the firm system users, including sales and transportation customers, who are responsible for a significant share of an LDC's fixed costs. See Commonwealth Gas Company, D.P.U. 91-60, at 74-75 (1991); Commonwealth Gas Company, D.P.U. 87-122, at 261-262 (1987). Conversely, IS transactions involve the sale of natural gas, and require excess commodity under contract as well as excess interstate pipeline capacity.

Transportation customers are responsible for their own gas procurement and do not cause LDCs to incur capacity-related costs; therefore, it would be in violation of cost-causation principles to pass a share of IS-related margins back to transportation customers.

Consequently, IS margins should be passed back only to sales customers. Similarly, CR transactions use interstate pipeline capacity held by LDCs on behalf of their firm sales customers who pay for that capacity through the CGAC. Therefore, margins associated with CR transactions margins should be flowed back only to firm sales customers, who bear the cost of the interstate pipeline capacity used to make CR transactions.

3. Threshold Level

Many of the commenters, including Berkshire, Boston Gas, and DOER, advocate the establishment of a threshold level of margin-sharing. Margins earned at or below this level would be passed back in full to firm customers. Any margins earned in excess of this

predetermined level would be divided between the LDC and its firm customers under the terms of a specific sharing arrangement. The Department finds that a threshold level would offer LDCs adequate incentive to engage in capacity-related transactions, including IT and CR. We further find that it is appropriate to base the threshold level on the margins separately earned from IT, IS, and CR transactions in an historical twelve-month period ending on April 30 of each year. Said margins shall be adjusted to reflect additions or losses from customers who switch from FT and FS to IT and IS service, and from IT and IS to FT and FS service. In addition, LDCs are directed to adjust the threshold annually to reflect sales of IT, IS and CR for the twelve-month period ending April 30 of each year.

4. Percentage of Margin to be Retained

With respect to the specific percentage of margins associated with IT, IS, and CR transactions to be passed back by LDCs to their customers, the Department has noted that there are a number of factors that may provide a basis for arriving at the appropriate margin split that would properly balance the risks and rewards of firm ratepayers and shareholders while providing LDCs with appropriate incentives. These include an evaluation of the incremental benefits associated with non-firm transactions, the potential to reduce average costs to firm customers through greater non-firm margin passbacks, the attraction of new interruptible loads, and the role of rate design in revenue stability. D.P.U. 93-60, at 323-325; Boston Gas Company, D.P.U. 92-259, at 94 (1993).

Based on these principles, the Department finds that the retention by LDCs of 25 percent of margins earned above the threshold established above is reasonable and consistent with the public interest. Consequently, such margin sharing shall be put into effect for each

LDC until it files its next general rate case or incentive rate proposal. Subject to the thresholds established pursuant to the above analysis, margins associated with IT transactions shall be passed back to firm sales and firm transportation customers, and margins associated with IS and CR transactions shall be passed back to firm sales customers. Any LDC currently treating IT, IS, or CR margins in a manner inconsistent with the above shall submit a revised CGAC that identifies the total margins generated from each market segment and the calculations for the margin splits based on the appropriate allocation and threshold levels, for effect on May 1, 1996. Those LDCs not currently engaged in margin sharing may implement margin-sharing arrangements in a manner consistent with this Order.

V. CONCLUSIONS

In Sections II, III, and IV, above, the Department has considered issues related to interruptible transportation and capacity release. This section summarizes the Department's conclusions on these issues.

With respect to IT, the Department has stated that its primary goal in this proceeding is to foster the efficient use of local distribution systems as a vehicle for promoting competition that will offer benefits to customers. The Department also concludes that it is appropriate to develop policies that do not hinder the potential for evolution in IT service, and finds that regulation of IT service, at least for the present, remains in the public interest.

The Department finds that the unbundling of interruptible services into IS and IT components would facilitate a comparison of gas prices and ensure the comparable transportation services necessary to provide competition. However, the Department finds that further unbundling of city-gate IS would not provide significant benefits to LDCs or

their customers at this time. Therefore, the Department directs LDCs to develop and implement plans to unbundle their burner-tip IS service into city-gate IS service and IT service from the city-gate to the burner-tip.

With respect to IT pricing, the Department has found that IT service shall continue to be priced on a VOS basis, with certain modifications. IT pricing shall not be linked to IS pricing, and shall recognize the role of gas-on-gas competition in today's energy markets. The Department has found that no ceiling price for IT is necessary, but has required that a floor price be established, representing the individual LDC's variable cost of providing IT service. The Department further has found that no minimum-take commitment is necessary or appropriate for IT service.

With respect to the terms and conditions for IT, the Department has found that proposed terms and conditions will be reviewed in individual LDC filings. The Department has found that a dual-fuel capability requirement is not necessary to ensure the efficient operation of the distribution system or the safe and efficient delivery of gas to interruptible customers and directs LDCs to develop terms and conditions which do not incorporate a requirement for dual-fuel capability.

With regard to CR, the Department rejects proposals to require LDCs:

(1) to assign interstate pipeline capacity to departing sales customers; (2) to post all slack capacity for release on a monthly basis; and (3) to post all prearranged capacity releases below the maximum rate on the interstate pipelines' EBB system. The Department has also concluded that a statewide EBB, operating in addition to the existing pipeline EBBs, would be duplicative and would not contribute to a more efficient market, and therefore we will not

require its development at this time.

With regard to ratemaking treatment for IT and CR, the Department has found that margin-sharing arrangements are preferable to margin imputation in LDC base rates as a means of ensuring LDC accountability for capacity-related decisions. The Department has also found that the bulk of margins associated with IT, IS, and CR should continue, at least for the present, to flow back to an LDC's firm customers.

The Department will allow each LDC to implement margin-sharing arrangements, using a margin split of 75/25 over designated thresholds until the filing of its next general rate or incentive rate proposal. Further, the Department directs each LDC to adjust its thresholds on an annual basis. Margins associated with IT transactions shall be passed back to FS and FT customers, and margins associated with IS and CR transactions shall be passed back to FS customers. Those LDCs not currently engaged in margin sharing may implement margin-sharing arrangements in a manner consistent with this Order.

VI. IMPLEMENTATION

Given the diversity among LDCs and IT customers, it is not possible to prescribe standard contract terms that address each LDC's pricing and operational issues. However, we find it appropriate to establish an implementation schedule that will permit parties to enter into negotiations on an informed basis.

While we have found that VOS pricing, with modifications, is appropriate for IT service, we recognize that there are areas of non-price discrimination, including notification and balancing provisions, that may occur in customer-specific negotiations. D.P.U. 85-178, at 59. Therefore, we find that a standard-offer contract for IT service which provides all

customers of an LDC with similar non-price terms is appropriate. Accordingly, the Department directs each LDC to file a standard-offer contract for IT service.²³ Bay State, Boston, ComGas and Colonial shall file a standard-offer contract within 45 days of the date of this Order; Berkshire, Essex, Fall River, Fitchburg and North Attleboro shall file standard-offer contracts within 90 days of the date of this Order.

With respect to existing IT service contracts, the Department hereby directs LDCs to commence negotiations with each IT customer for the purpose of developing a new IT contract with price and non-price terms consistent with this Order. Within 60 days of the date of the approval of a standard-offer contract, each LDC shall notify the Department of the status of any negotiations with current IT customers.

²³ The Department acknowledges that there may be exceptional circumstances under which departure from standard-offer contracts is warranted; in such cases these contracts must be submitted with explanation of any specific changes.

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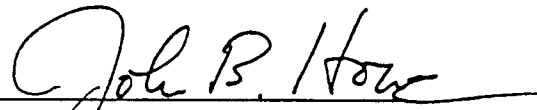
VII. ORDER

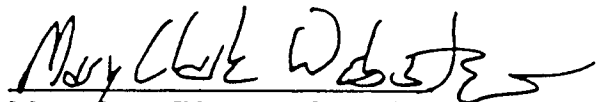
Accordingly, after due notice, hearing and consideration, it is

ORDERED: That future interruptible transportation standard-offer contract filings shall be submitted and reviewed in a manner consistent with this Order.

By Order of the Department,




John B. Howe, Chairman


Mary Clark Webster, Commissioner

A true copy
Attest:


MARY L. COTTRELL
Secretary


Janet Gail Besser, Commissioner